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ZIMBABWE AGRICULTURAL INCOME AND EMPLOYMENT DEVELOPMENT (Zim-AIED)

ANNUAL REPORT #3 – FY2013

October 2013
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ACRONYMS

ASP-Z	Agrodealer Strengthening Program in Zimbabwe
BDS	Business Development Services
BiZ	Bio-Innovation Zimbabwe
CABS	Central African Building Society
CBZ	Commercial Bank of Zimbabwe
CESVI	Cooperazione e Sviluppo
CIRIS	Client Impact and Results Information System
CLUSA	Cooperative League of the United States of America
COMESA	Common Market for Eastern and Southern Africa
COSV	Coordination Committee for Voluntary Service
EMMP	Environmental Mitigation and Monitoring Plan
EPA	Environmental Protection Agency
EU	European Union
FTF	Feed the Future
GAP	Good Agricultural Practice
GMO	Genetically Modified Organism
HACCP	Hazardous Analysis Critical Control Points
HPC	Horticultural Promotion Council
IEE	Initial Environmental Examination
IMC	Irrigation Management Committee
IPM	Integrated Pest Management
IRD	International Relief and Development
MAMID	Ministry of Agriculture, Mechanization and Irrigation Development
MLRP	Mashonaland Livelihoods Restoration Project
MSDS	Material Safety and Data Sheets
MSME	Micro, Small and Medium Enterprise
PERSUAP	Pesticide Evaluation Report and Safe Use Action Plan
PMP	Performance Management Plan
PMSP	Pest Management Strategy Plan
POP	Pesticide Organic Pollutant
PRIZE	Promoting Recovery In Zimbabwe Project
REALIZ	Restoring Economic Agricultural Livelihoods in Zimbabwe Program
REVALUE	Restoring Livelihoods Strengthening Value Chains Program
SAT	Sustainable Agriculture Technology
SUAP	Safe Use Action Plan
TBT	Tjinyunyi Babili Trust
USEPA	United States Environmental Protection Agency
ZAPAD	Zimbabwe Agriculture Production and Agribusiness Development Program
ZESA	Zimbabwe Electricity Supply Authority
ZFAT	Zimbabwe Farmers Alliance Trust
ZFU	Zimbabwe Farmers Union
Zim-AIED	Zimbabwe Agricultural Income and Employment Development
ZINWA	Zimbabwe National Water Authority

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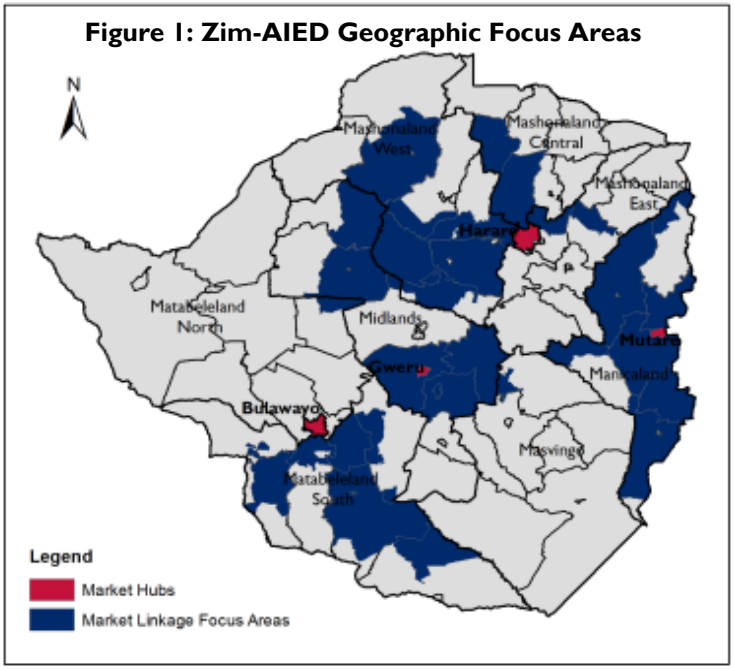
FOREWORD

The Zimbabwe Agricultural Income and Employment Development (Zim-AIED) program began in October 2010 and will run through February 2015. Zim-AIED is providing technical assistance to improve household food security and increase incomes and employment of rural households. Activities started in all agro-ecological regions and became more focused this fiscal year on specific low-income and food-insecure areas where farmers have the potential to move from subsistence to small-scale commercial agriculture (Figure 1). The program is generating new income streams from employment created in the wider agricultural sector and contributing to improved food security for all beneficiary households. Beneficiaries are earning new income from both surplus production of food crops grown for home consumption and from production and marketing of higher-value cash crops and livestock.

Figure 1: Zim-AIED Geographic Focus Areas



Commercialization of small-scale farmers is being achieved by:

- Linking producers to local, national, regional, and international buyers.
- Providing access to credit.
- Raising efficiencies in production systems for an improved combination of livestock, cash and food crops.
- Training farmers to adopt good agricultural and business practices.

The program is building demand for a range of crops and products by linking farmers with local, regional, and international buyers and training growers on productivity, quality, continuity, and cost-competitiveness. It also provides specialized technical support for the production of food crops to sustainably increase food availability in areas and communities most vulnerable to food insecurity.

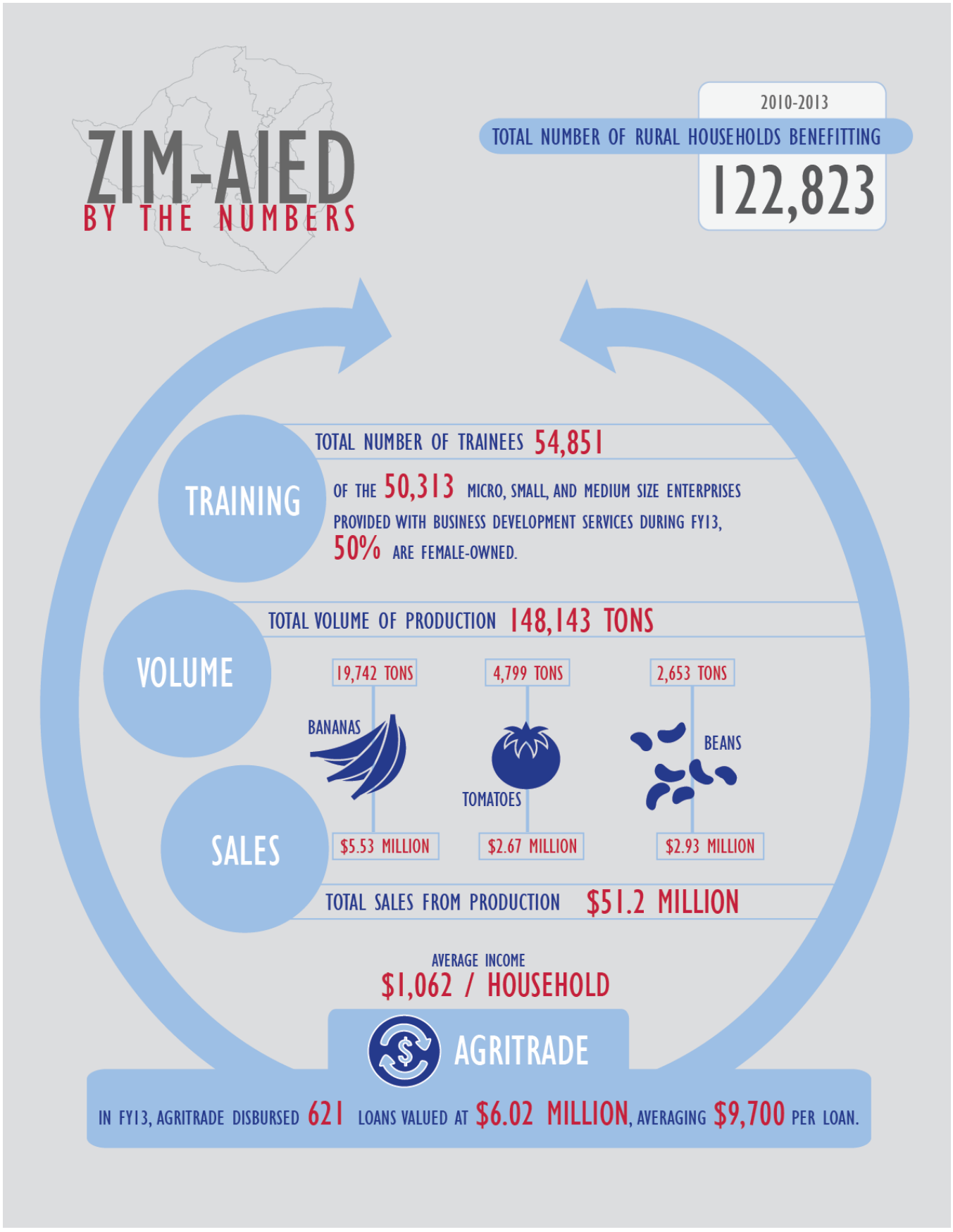
Fintrac, a US-based consulting company, is implementing Zim-AIED in cooperation with four subcontractors and grantees: International Relief and Development (IRD); the Cooperative League of the USA (CLUSA); Sustainable Agricultural Technology (SAT); and CARE International. Other local nongovernmental organizations and commercial companies work with the program as development partners, in some cases co-funded through a cost-sharing grant facility. This $5 million facility is used to leverage technical support for farmers through conventional grants, and also to fund purchases of essential inputs and new technologies on a cost-recovery basis. Zim-AIED also includes a $10 million revolving loan fund – AgriTrade – managed by three local banks that provide matching funds and loans on competitive commercial terms.

In summary, Zim-AIED is a market-driven program that works closely with small-, medium-, and large-scale buyers to raise demand and increase competition for smallholder-grown crops and products. The program directly contributes to food availability and access by concurrently increasing production of food crops and raising incomes of rural households in selected areas.

1. EXECUTIVE SUMMARY

This is the third annual report of the Zimbabwe Agricultural Income and Employment Development (Zim-AIED) program. Zim-AIED is providing technical assistance to improve the food security and increase household incomes of 150,000 small-scale farmers throughout Zimbabwe. Significant achievements this year include but are not limited to:

- **Programmatic integration**: Developing **market linkages** to increase the number of companies purchasing products from smallholders; increasing the availability of **working capital** to rural-based agrodealers and smallholders through the AgriTrade facility and recoverable grants activities; **increasing production** of maize and other food crops; raising smallholder earnings from cash crops and livestock; and actively supporting **new agribusiness investment**.
- **49,992 rural households (59,990 farmers) received technical assistance** for the first time this year to raise productivity, access new markets, obtain credit, and increase incomes and employment opportunities. The cumulative number of beneficiaries, including those who joined Zim-AIED during the first and second year, is 122,823 households (147,388 farmers). A total of 54,851 of both new and continuing beneficiary households received training and technical assistance during the reporting year.
- **$36.36 million in incremental sales** recorded for the year, equating to sales per household of $818 against a baseline of $754. Of these sales, $16.39 million were sold to commercial partners through formal marketing and credit arrangements with smallholder beneficiaries. Most sales were recorded on agribusiness hubs where buyer participation is high.
- Average **incomes from agricultural production increased by 27 percent**, from $835 per household in FY12 to $1,062 today. The largest contributors to household income were from horticultural crops and livestock.
- **8,018 farmers on 4,664 hectares in 35 irrigation schemes enhanced** their ability to function as commercial agribusiness hubs thanks to strengthened linkages facilitated by Zim-AIED with input suppliers, marketing organizations, and microfinance institutions.
- **621 loans valued at $6.02 million disbursed** by partner banks. There were 351 new borrowers (including 30 smallholder farmers) this fiscal year, of which 34.5 percent were women. The cumulative total of loans disbursed since inception is now $14 million.
- **$419,498 in recoverable grants repaid** by farmers in FY13, reducing the net disbursement since inception to $3.41 million. These grants support a wide range of interventions to enhance the productivity, product quality, and marketing capacity of smallholder farmers. Forty-one percent of all grants funding is earmarked as "recoverable" and will ultimately be repaid by beneficiary farmers and partner companies, to be later reused for new program activities.
- Successfully implemented a **gender mainstreaming policy** whereby men, women, young people, and disadvantaged groups were given special consideration in the planning of all program interventions. As a result, 48 percent of farmer beneficiaries this year were women and 50 percent of all beneficiaries since inception have been women.
- In FY13, Zim-AIED **surpassed the annual targets on 8 of 13 FTF indicators**. The program is on course to meet its life-of-project targets, including its 10 custom indicators.


ZIM-AIED
BY THE NUMBERS
2010-2013
TOTAL NUMBER OF RURAL HOUSEHOLDS BENEFITTING
122,823
TRAINING
TOTAL NUMBER OF TRAINEES 54,851
OF THE 50,313 MICRO, SMALL, AND MEDIUM SIZE ENTERPRISES PROVIDED WITH BUSINESS DEVELOPMENT SERVICES DURING FY13, 50% ARE FEMALE-OWNED.
VOLUME
TOTAL VOLUME OF PRODUCTION 148,143 TONS
19,742 TONS
BANANAS
4,799 TONS
TOMATOES
2,653 TONS
BEANS
SALES
$5.53 MILLION
$2.67 MILLION
$2.93 MILLION
TOTAL SALES FROM PRODUCTION $51.2 MILLION
AVERAGE INCOME
$1,062 / HOUSEHOLD
AGRITRADE
IN FY13, AGRITRADE DISBURSED 621 LOANS VALUED AT $6.02 MILLION, AVERAGING $9,700 PER LOAN.

2. PROGRAM OBJECTIVES

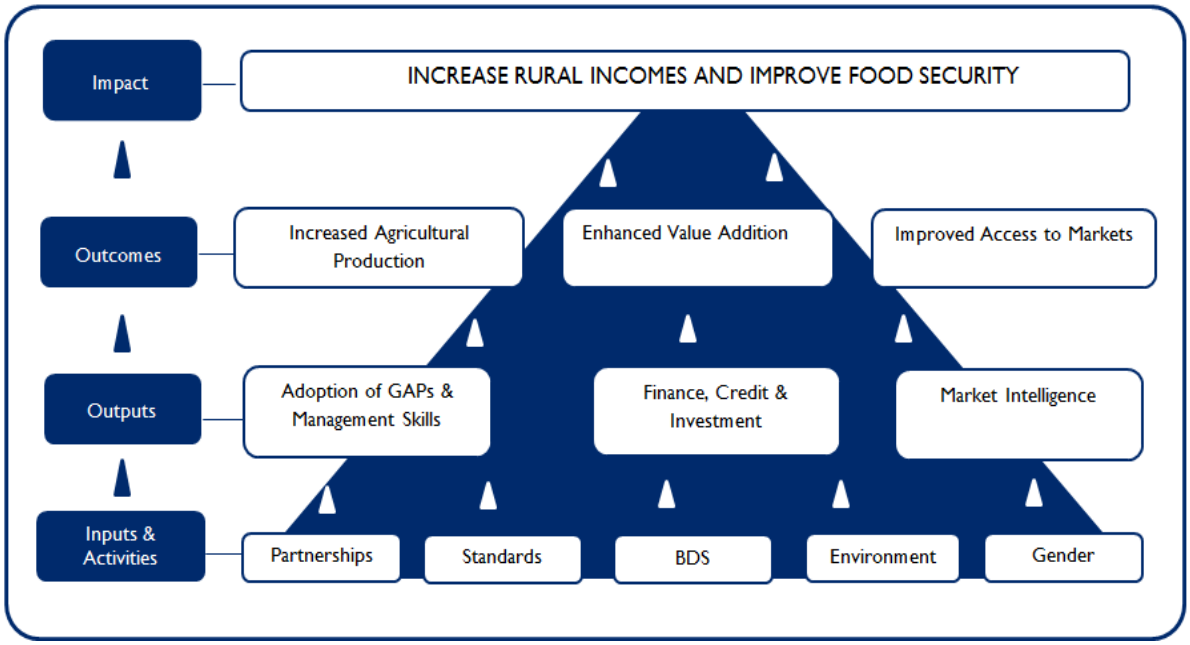
The primary objective of the Zim-AIED program is to improve food security for 180,000 Zimbabwean small-scale farmers (150,000 households) located in communal and old resettlement areas by increasing household incomes from agriculture and increasing food production among vulnerable but commercially viable farmers. This goal is being reached through the achievement of three intermediate results:

1. *Expanded Market Access*: measured through change in volume and value of sales of targeted commodities and integration of farmers into out-grower and contract farming schemes for selected cash crops.
2. *Increased Agricultural Production*: measured through changes in total production and productivity; changes in product mix to include high-value crops; and changes in area under production at the household and national level. The emphasis is on commercially viable production of both food and cash crops.
3. *Enhanced Value Addition*: measured through change in farm sales of semi-processed products and crops for processing, new employment generation in value-added products, and investment in processing facilities.

The focus of Zim-AIED is on profitable livestock, food, and cash crop production; new sales and income generation; and employment creation. It targets low income households in rural areas. Interventions are aimed at improving the livelihoods of "vulnerable-but-viable" farmers through sustainable commercial initiatives. Already, many rural families in partnership with Zim-AIED are moving from subsistence to commercial farming and increasing their asset base through investment in high-value crops and livestock.

Figure 2 shows the results framework for Zim-AIED implementation. The program focuses on expanding market access, increasing the availability of credit and finance across the value chain, raising production, and adding value to crops. To maximize outreach and ensure sustainability, these interventions are carried out via partnerships with commercial companies with additional support from NGOs, particularly in vulnerable areas.

Figure 2: Zim-AIED Results Framework Summary



The program's technical team is developing commercial partnerships to create a national network of agribusinesses that can strengthen access to markets at fair prices; provide working capital and finance at realistic rates; supply inputs efficiently; and provide extension and training to growers as an embedded cost. During this quarter, the Zim-AIED technical team continued to focus on:

- **Market linkages** – increasing the number of companies and formal buyers purchasing products from smallholders both through contracts and by opportunistic buying.
- **Finance and credit to traders** – increasing the availability and disbursement of working capital to rural-based agribusiness investors and to agritraders buying products from and suplying inputs to smallholders at the village level.
- **Increasing direct credit to farmers** through commercial loans, advances from buyers, and recoverable grants.
- **Staple food crops** – increasing local and national production of maize, beans, groundnuts, and root crops at competitive prices.
- **Cash crops** – raising smallholder earnings through surplus production of food crops and commercial production of high-value cash crops, particularly banana, vegetables, and paprika.
- **Rural entrepreneurs** – actively supporting a new generation of small- and medium-sized agribusinesses that will invest in rural areas across Zimbabwe.
- **Commercializing targeted irrigation schemes** – through rehabilitation, crop selection and scheduling (calendarization) for higher returns and year-round production, increased access to credit, business planning, and introduction of new buyers.

3. ACTIVITIES

Program activities across all focal areas included a range of interventions, from credit for livestock traders to crop-specific irrigation and marketing assistance. The sections below measure Zim-AIED activities measured against 13 Feed the Future, five USAID gender indicators, and 10 custom indicators divided into the following six broad evaluation categories.

- **Beneficiaries:** number, gender balance, geographical spread, and types of support received.
- **Sales:** amount of money earned by Zim-AIED beneficiaries, measured by incremental sales of all agricultural products – focusing on maize, paprika, and banana.
- **Gross margin and net income:** profitability and net earnings from agricultural activities.
- **Finance and Credit**: AgriTrade revolving fund and micro-credit support for rural traders and producers.
- **Business Development**: managing farms as a business, recordkeeping, crop budgets, marketing, and contract production.
- **Productivity:** increased production and net returns from crop and livestock products.

3.1 BENEFICIARIES

FTF 4.5.2-13 Number of rural households benefiting from USG Assistance

The Zim-AIED annual target for FY2013 was to reach out to 34,000 households through the provision of a wide range of interventions including training in agronomy, livestock husbandry, and business skills; direct technical assistance to introduce new technologies; credit for producers and MSMEs; and creation of new market linkages for both inputs and outputs. During FY2013, 49,992 households joined the Zim-AIED program, bringing the three year cumulative figure to 122,823 households; 38 percent more than the cumulative Year 3 target of 89,038. The adoption of the agribusiness hub approach across all program activities was instrumental in intensifying beneficiary outreach and engagement within the targeted geographical areas.

Table 1:Geographical location of Zim-AIED beneficiaries FY2011 to FY2013

Province	FY2011+FY2012			FY2013			Cumulative Total to Date		
			Total	M	F	Total	M	F	Total
Manicaland	9,877	10,048	**19,925**	3,013	3,202	**6,215**	12,890	13,250	**26,140**
Mashonaland Central	4,820	4,141	**8,961**	4,957	4,091	**9,048**	9,777	8,232	**18,009**
Mashonaland East	5,526	5,532	**11,058**	5,855	6,186	**12,041**	11,381	11,718	**23,099**
Mashonaland West	6,011	7,314	**13,325**	4,764	1,481	**6,245**	10,775	8,795	**19,570**
Masvingo	3,500	6,100	**9,600**	1,704	2,775	**4,479**	5,204	8,875	**14,079**
Matabeleland*	2,038	2,465	**4,503**	1,025	1,678	**2,703**	3,063	4,143	**7,206**
Midlands	3,331	2,128	**5,459**	4,828	4,433	**9,261**	8,159	6,561	**14,720**
Total	**35,103**	**37,728**	**72,831**	**26,146**	**23,846**	**49,992**	**61,249**	**61,574**	**122,823**

***Includes Matabeleland North and South** *Source: CIRIS*

Table 1 provides an analysis of the number of rural households that have benefited from Zim-AIED's interventions this year and since program inception in October 2010. Women accounted for 48 percent of total beneficiaries for FY2013 compared to 52 percent in FY2012. Despite this drop, the cumulative number of female beneficiaries since inception stands at 50 percent. Midlands, Mashonaland East, and Mashonaland Central recorded beneficiary increases above 100 percent as result of the effective implementation of the agribusiness hub concept in new wards started in FY2013.

Table 2: Number of individuals participating in Zim -AIED activities

Activity	FY2011	FY2012	FY2013			Cumulative to Date		
			M	F	Total	M	F	Total
Training and technical assistance	11,896	58,055	26,106	28,745	54,851	50,450	59,279	109,729
Traders receiving loans	305	408	213	108	321	548	486	1,034
Farmers receiving loans	-	-	49	41	90	49	41	90
Farmers linked to markets	-	11,194	14,428	4,101	18,529	18,788	10,346	29,134
Contracted farmers	-	10,350	3,239	2,989	6,228	8,207	8,371	16,578

Table 2 highlights the different types of interventions provided to households participating in the Zim-AIED program. In the reporting year, 54,851 individual farmers received training and technical assistance from Zim-AIED field agronomists and its partners, with 18,529 establishing productive linkages to either input or output markets. In addition, 6,228 farmers were contracted by different buyers for livestock and crop production.

Ninety smallholder farmers participating in Zim-AIED activities received production loans from microfinance institutions during FY2013. Zim-AIED's AgriTrade partner, MicroKing, disbursed the majority of the loans (79) while Untu Capital disbursed the balance (11). The loans financed farmers' working capital for the production of mainly horticultural crops on irrigation schemes.

Table 3: Rural households assisted by Zim-AIED to date

Number of rural households							
FY2013				Cumulative To Date			
Target	Achieved	Variance	% Variance	Target	Achieved	Variance	% Variance
34,000	49,992	15,992	47	89,038	122,823	33,785	38
							Source: CIRIS

In its 36 months of implementation, Zim-AIED interventions impacted a total of 122,823 rural households (Table 3). These households have been linked to markets (output and input), trained in agronomy, livestock husbandry and business skills, and provided with direct technical assistance by Zim-AIED technical staff and through partnerships with specialized local service providers, NGOs, and private companies working in targeted agricultural value chains. This resulting impact is a significant and measurable increases in sales and income.

3.2 INCREMENTAL SALES

FTF 4.5.2-23 Value of incremental sales attributed to FTF implementation

Sales data collected from a sample of 514 Zim-AIED beneficiaries through the end of August 2013 that has been extrapolated to the full Zim-AIED population of beneficiary households is shown in Table 4. Sales estimates for crops and livestock amounted to a total of $60.85 million, with $40.7 million in crop sales and $20.08 million in livestock. Maize accounted for the largest contribution to households sales at 41percent given that it is the principal crop grown by 92 percent of Zim-AIED beneficiaries. Through the SAT subcontract, which promotes the program's agribusiness hub model in dryland areas throughout the country, Zim-AIED supported the commercialization of maize production and other staple crops around 40 hubs through training and technical assistance on productivity issues, linking the farmers to both input and output markets, and linking agritraders to the AgriTrade credit facility.

Livestock sales remain an important source of income contributing 33 percent of all sales income. Procurement records from AgriTrade beneficiaries indicate that purchases were largely in livestock,

accounting for 68 percent of the total purchases in FY2013 as a result of increased market linkages between buyers and farmers. Types of livestock sold include cattle ($10.43 million), pigs, goats, and poultry.

Table 4: Value of Sales by Zim-AIED Beneficiaries FY2013

Product	Volume of Sales (tons)	Value of Sales (US$)	% of Sales
Bananas	19,742	5,526,757	9.08
Maize	80,242	25,086,222	41.24
Paprika	737	910,855	1.49
Sugar Beans	2,425	2,934,162	4.82
Fine Beans	10.00	5,415	0.01
Bird's Eye Chilies	72.33	59,930	0.10
Cabbages	1,786	339,057	0.56
Chili Peppers	257	151,630	0.25
Cow Peas	194	93,516	0.15
Groundnuts	2,061	1,013,842	1.67
Butternuts	547	257,090	0.42
Peppers	34	17,000	0.03
Potatoes	900	603,000	0.99
Soybeans	132	65,364	0.11
Sweet Potatoes	3,040	1,029,013	1.69
Tomatoes	4,729	2,670,153	4.39
Livestock	-	20,084,017	33.00
Total Sales		**60,847,023**	

Source: Zim-AIED

3.3 GROSS MARGIN AND NET INCOME

FTF 4.5.4 Gross margin in dollars per hectare for three selected products

Gross margin takes into account the value of production retained for home consumption and barter as well as sales, all of which contribute to net household income. Actual gross margins depend on a number of factors, ranging from rainfall patterns to the availability of inputs and markets. Table 5 provides actual gross margins for the reporting period derived from a sample of maize, banana, and paprika growers who received various forms of technical assistance through Zim-AIED and its partners. Sample data collected indicate that beneficiary farmers have achieved gross margins of $213, $1,834, and $767 per hectare for maize, banana, and paprika, respectively, this season.

Table 5: 2013 Estimated gross margins for maize, banana, and paprika

Product	Area (ha)	Yield (tons/ha)	Price/ton	Value of Production	Cost of Production	GM %	Net Income	GM/ha	Target
Maize	68,057	1.62	$313	$34,422,024	$19,936,334	42	$14,485,690	$213	$250
Banana	1,872	10.55	$280	$5,526,757	$2,094,437	62	$3,432,320	$1,834	$1,000
Paprika	689	1.07	$1,235	$910,855	$382,178	58	$528,677	$767	$1,500

Source: Zim-AIED

The gross margin for banana exceeded the target by 83 percent. This is largely attributed to trainings and technical assistance leading to the uptake of good agricultural practices (GAPs) and application of new technologies by smallholder farmers. The ripple effect of improved banana yields and quality, together with stronger links to several buyers, includes a regional increase in price from $0.10 per kilogram at program inception to the current price of $0.30 per kilogram, and prices have remained at this level for the last two seasons. However, the project underestimated the impact of the adoption of Zim-AIED's recommended technological package and established market linkages by existing banana plantations, and a considerable percentage of this increased output in bananas has come from the rejuvenation of old plantations in Honde and Rusitu Valleys taking advantage of the resulting price stabilization. Farmers only started producing tissue culture bananas in Honde Valley in FY2013, so their production has had only a nominal influence on yields and returns.

Gross margins achieved for maize were 14.8 percent lower than the target due to challenges accessing fertilizers and seeds. Through Zim-AIED's subcontract with SAT, only 460 farmers (1.5 percent of the targeted 30,000 farmers) accessed adequate inputs. Because the bulk of maize is grown under dryland conditions, excessive rains followed by extended drought in December and January 2013 resulted in nutrient leaching that undermined the yield potential. In addition, the prolonged dry spell in many areas coincided with the grain filling stage in January and February, which negatively affected yields.

Paprika's average gross margin in FY2013 was 49 percent below target, which appears to be due to underreporting sales although yields also decreased from the expected 1.3 tons per hectare to 1 ton due to the short rainfall period. In most paprika areas, the rainy season ended early (mid-January instead of the end of March) in FY2013, negatively affecting yields.

Sample data indicate that Zim-AIED beneficiaries realized a net income of $1,062 per household from a combination of cropping and livestock enterprises, which is a 100 percent increase over baseline and a 21 percent increase above FY2012 beneficiary income levels. The largest contributors to household income were from horticultural crops and livestock.

3.4 FINANCE AND CREDIT

Zim-AIED provides funds and technical assistance for a revolving credit facility, AgriTrade, which contributes towards Zim-AIED's achievements against the four Feed the Future indicators listed below.

FTF 4.5.2-11 No. of …private enterprises (for profit)… receiving USG assistance.

FTF 4.5.2-29 Value of agricultural and rural loans

FTF 4.5.2-38 Value of new private sector investment in the agriculture sector….

FTF 4.5.2-43 No. of firms engaged in agriculture …operating more profitably…

AgriTrade is a revolving credit fund operated by three partner banks (MicroKing, Trust Bank and CABS) under a wholesale loan agreement, whereby banks borrow funds at zero percent interest and contribute dollar-for-dollar matching funding with their own capital. The funds are then used to extend loans to:

- Zim-AIED's agribusiness partners who supply inputs and buy agricultural commodities produced by smallholder farmers on communal and purchase land.
- Smallholder farmers benefiting from Zim-AIED's technical assistance and training.
- Agribusinesses that add value to the agricultural produce of smallholder farmers.

From inception through the end of the fiscal year, AgriTrade has disbursed a total of 1,499 loans worth more than $13.9 million (Table 6). In FY2013, 621new loans valued at $6.0 million (Table 7) were disbursed. MicroKing disbursed the bulk of the loans (605 micro loans valued at $3.130 million) while CABS and Trust Bank disbursed nine loans valued at $2.139 million and seven loans valued at $0.754 million, respectively. Although the total number of new loans fell by 3 percent in FY2013, the total value of loans disbursed increased by 12 percent.

Table 6: Loans disbursed to date

	FY2011	FY2012	FY2013	Cumulative Disbursed
Amount of Loans Disbursed	$2,539,400	$5,376,002	$6,023,493	**$13,938,895**
Number of loans Disbursed	237	641	621	**1,499**
Average Loan Size	$10,715	$8,387	$9,700	**9,299**

Table 7: Loans disbursed in FY2013

	Q1	Q2	Q3	Q4	Total Disbursed In FY2013
Amount of Loans Disbursed	1,575,935	$1,872,447	$780,161	$1,794,950	**$6,023,493**
Number of loans Disbursed	172	213	133	103	**621**
Average Loan Size	9,162	$8,791	$5,866	$17,427	**$9,700**

As of September 30, 2013, the AgriTrade active portfolio was at $4.6 million (Table 8), 28 percent above the level of the previous fiscal year ($3.57 million). CABS and MicroKing recorded net increases in their active portfolios of 182 percent ($0.8 to $2.2 million) and 66 percent ($1.0 to $1.7 million), respectively.

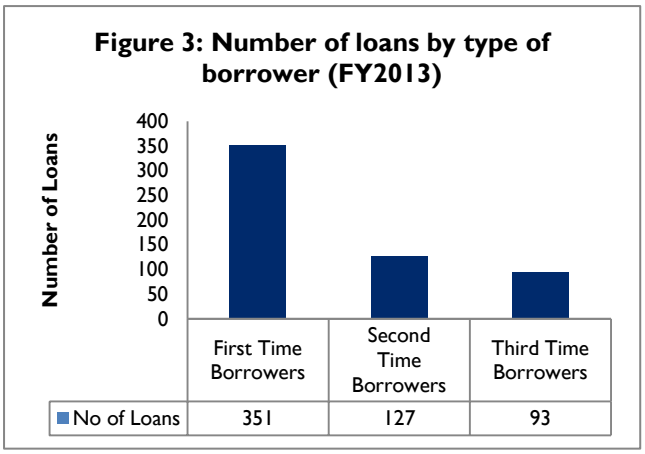
Trust Bank's active portfolio decreased by 60 percent ($1.8 to $0.7 million) as loan repayments exceeded disbursements. This was the effect of a deliberate strategy by Zim-AIED to increase collections of outstanding matching funds through the direct transfer of borrowers' loan repayments to Zim-AIED's account, a necessary measure as the bank continues to face challenges in meeting RBZ capitalization requirements.

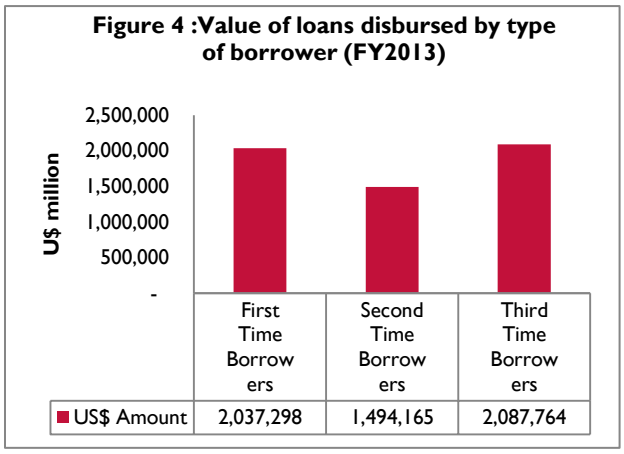
By the end of FY2013, total loan capital to the three partner banks was $2.1 million compared to $2.4 million at the end of FY2012. To date, the AgriTrade facility had leveraged $2.21in new loans to the agricultural sector for each $1.00 supported by USAID.

The number of unique AgriTrade borrowers fell by 13.9 percent to 351 borrowers in FY2013 compared to 408 in FY2012 (Figure 3). AgriTrade is focusing more on targeting first-time borrowers while graduating third-time borrowers to the banks' regular portfolios. Fourth-time borrowers began to borrow under the partner banks' regular portfolios in April 2013.

Table 8: AgriTrade Portfolio – September 30, 2013

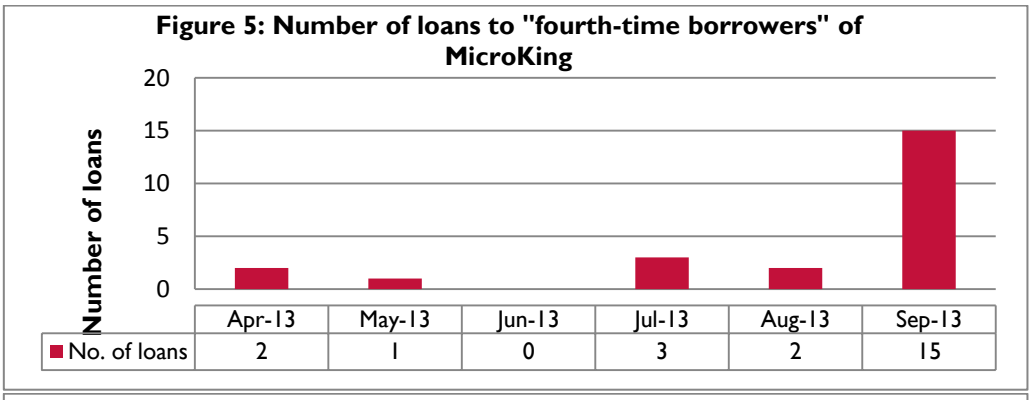
	CABS	TRUST	MicroKing	Total Portfolio
Loans Outstanding	$2,162,779	$704,491	$1,701,059	**$4,568,329**
Number of borrowers	10	28	443	**481**
USAID/Zim-AIED Loan Capital	$400,000	$812,016	$859,500	**$2,071,516**
Partner Bank Loan Capital	$1,762,779	($107,525)	$841,559	**$2,604,338**
USAID Funds Leverage Ratio	5.41	0	1.98	**2.21**

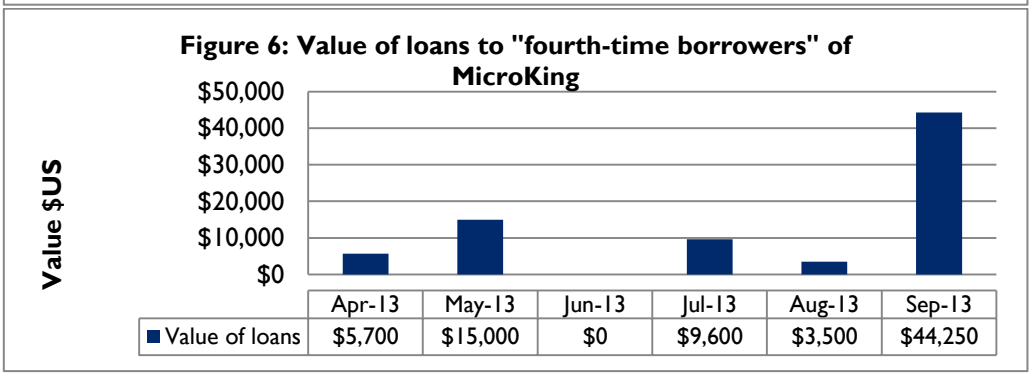




The value of loans to third and first time borrowers are nearly at par, accounting for 34.6 percent and 33.8 percent of total disbursements in FY2013 (Figure 4). However, first-time borrowers account for 62 percent of the total number of disbursements. Average loan sizes per borrower for first, second and third time borrowers were $5,804, $11,765, and $22,449, respectively.

To date, MicroKing is the only partner to disburse new loans under its regular portfolio to former third-time borrowers (Figure 5 & 6). A total of 23 loans valued at $78,000 have been disbursed since April 2013. The majority of these borrowers accessed loans at MicroKing's normal commercial rates of 48 percent per year.





CABS

Although CABS made considerable effort to grow its AgriTrade portfolio in FY2013, its total number of loans disbursed lower than projected with nine new loans valued at $2.1 million; an indicator of the bank's cautious and conservative approach.

The AgriTrade Credit Facility loan agreement was modified in September 2013 to incorporate a fixed schedule for capital repayment. Beginning in September 2013, CABS will make five quarterly payments of $100,000 each to reimburse the $500,000 in USAID funds that were advanced by the program. To date, CABS has honored its commitments and made the first repayment of $100,000 on September 30, 2013. As a result, CABS's current AgriTrade portfolio has risen to a current matching ratio of 5:1.

Direct lending by CABS to smallholder farmers continues to be a work in progress, with the initial group of 37 smallholder banana farmers in Honde Valley expecting to receive loans in early FY2014. Part of the delay has been the banks' insistence that farmers take out credit insurance policies as security for the loans.

MicroKing

MicroKing increased its outreach by adding two new rural branches in Gokwe (Midlands) and Chipinge (Manicaland) in FY2013. The Chipinge branch disbursed its first AgriTrade loans in July 2013 to 44 smallholder farmers of the Musikavanhu Irrigation Scheme to finance inputs for potato, tomato, paprika, onion, and green mealies. The Chipinge branch is also planning to take over the capital debt and finance working capital for the 440 banana farmers at Mutema and Chibuwe irrigation schemes managed by Zim-AIED partner Matanuska. The Gokwe branch is targeting rural agrodealers that buy agricultural produce and sell farm production inputs.

During FY2013, MicroKing averaged 50 loan disbursements (totaling $100,000 to $300,000) per month. The majority of loans were less than $5,000 with only eight loans above $100,000. MicroKing ranked lowest in terms of both number of loans (16.0 percent) and value of loans (13.3 percent) in the fourth quarter due largely to the uncertainties associated with the change in majority shareholding of its parent company, Kingdom Bank, now Afrasia Kingdom, which had its majority shares acquired by Afrasia Bank in the third and fourth quarters. This has created new liquidity challenges as the bank requires an additional $20 million in order to meet the next level of capital requirements of $50 million.

Trust Bank

Trust Bank's AgriTrade portfolio has been underperforming since the start of FY2013. The bank disbursed six loans valued at $0.72 million in the first quarter and a single loan for $30,000 in the second quarter. No new loans were disbursed in the third and fourth quarters. Despite relief given by the Central Bank, Trust Bank has yet to meet the capital requirement of $25 million that was due on December 31, 2012.

In the first quarter of FY2013, Zim-AIED requested Trust Bank to make monthly repayments of $50,000 in order to adjust funding according to the 1:1 matching requirement. Trust Bank has since only made two repayments totaling $100,000 and closed the first quarter with an underutilized funds position of $775,000. By July 2013, Zim-AIED established a new arrangement effective for the immediate transfer of all loan repayments by AgriTrade borrowers to Zim-AIED's account.

Trust has honored this agreement and, to date, has repaid a total of $440,000, bringing the total in USAID funding down from 1.35 million in FY2012 to $812,000 by September 30, 2013.

Concurrently, Trust Bank has been seeking an outside investor for the additional $9 million needed to meet the $25 million capital requirement.

Portfolio at Risk (PAR)

The AgriTrade active loan portfolio at risk (PAR), which includes all loans 31 to 180 days past due, closed at 6 percent at the end of FY2013. A single loan of $175,000 from CABS to Rize Enterprises accounted for 64 percent of the total value of loans past due. Trust Bank and MicroKing constituted the remaining 36 percent.

Table 9: Portfolio at Risk	CABS	Trust	MK	Total as of September 30, 2013
Loans past due > 30 days <180 days	$175,618	$43,678	$55,138	**$274,434**
Number of past due loans	1	7	51	**59**
PAR (%)	8.2	6.2	3.2	**6.0**
Non-performing loans >180 days	$0	$220,157	$130,208	**$350,365**
Non-performing loans	0	12	56	**68**
Non-performing loans (%)	0	31.3	7.7	**7.7**

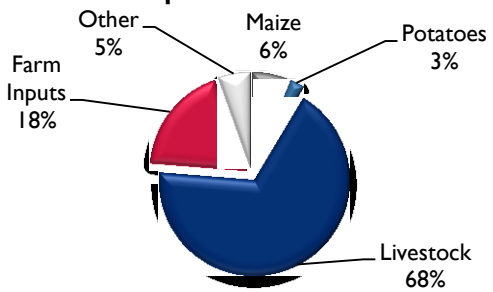
Non-performing loans (i.e. loans above 180 days past due) closed FY2013 at 7.7 percent. Despite having the large Rize Enterprises loan in arrears, CABS managed to maintain a clean book closing FY2013 with no non-performing loans on its books. MicroKing accounted for the largest percentage by number of loans (82 percent) while Trust Bank accounted for the largest percentage by value of non-performing loans (63 percent).

Overall, non-performing loans under Trust Bank have been difficult to collect since the start of FY2013. Legal action has been filed on all 12 loans to liquidate the borrowers' properties as the last option for recovery. MicroKing is gradually reducing its non-performing book through surety guarantors as the loan amounts are relatively small at $5,000 and below.

Commodities Purchased

Recorded commodities purchases using AgriTrade loans totaled $10.760 million in FY2013, 17 percent lower than in FY2012 ($13.005 million). Purchases were dominated by livestock sales which accounted for 68 percent of the total purchases in FY2013 (Figure 7).

Figure 7 : Commodities purchased FY2013



Cattle sales are regulated and records are mandatory, therefore sales information is easy to access compared to other commodities. Farm inputs, accounting for 18 percent of all sales, were also easy to collect as they are generally backed up by purchase receipts from agrodealers. Recorded purchases of other commodities relied on borrowers submitting purchase data which were often incomplete. Maize, potatoes, and other crops accounted for the remaining 14 percent.

Table 10: Recorded Purchased Commodities

Commodities Purchased	FY2013 Purchases	Cumulative since Inception	Cumulative % of Total
Maize	$667,328	$2,596,365	10.9
Potatoes	$257,302	$975,713	4.1
Livestock	$7,281,592	$15,669,454	65.9
Farm Inputs	$1,977,702	$3,197,022	13.5
Other	$576,620	$1,323,618	5.6
Total	**$10,760,544**	**$23,762,172**	100

Since program inception, recorded sales from the AgriTrade facility had accumulated to $23.76 million. The largest number of AgriTrade loans has continued to serve smaller borrowers in rural areas with 92 percent of all loans being $5,000 or less. These loans have been critical to stimulating the rural economy and supporting purchases of maize, sugar beans and vegetables, livestock trading, and the consolidation of produce for national buyers and processors throughout the focus areas where Zim-AIED operates.

3.5 BUSINESS DEVELOPMENT

Business development services are a cross-cutting activity that contributes directly to all Zim-AIED results. The core task is to assist program beneficiaries in identifying permanent opportunities for making more money. During the year, activities focused specifically on the following:

- **Developing the organizational capacity of farmer groups** – increasing the capacity of farmer groups to participate in productive value chains by providing training and support to leaders in key managerial duties such as budgeting, work planning, simple financial management, and democratic group decision making.
- **Contract farming** – fostering good business ethics and improving trust between buyers and growers by facilitating contract design and negotiations.
- **Business skills** – improving planning and decision making by imparting basic business skills such as enterprise budgeting, break-even analysis, and recordkeeping.
- **Collective marketing** – reducing transaction costs by linking farmer groups to input and output markets.
- **Farmer-led extension systems** – training lead farmers to establish a permanent knowledge and skill base within the community to promote the adoption of GAPs.

Technical support was provided in governance, administration, and collective access to both input and output markets for existing and new farmer groups. Training focused on group management and leadership skills, enterprise budgeting, contract management, credit control, recordkeeping, risk management, and marketing principles to equip farmer groups with the basic business skills.

To ensure all targeted farmers adopt good business and agricultural practices regardless of the size of their operation, all activities took place in cooperation with private sector partners or nongovernmental organizations linked to for-profit companies (Annexes 3-6). Some of these partners are subgrantees or subcontractors while others are buyers and lenders who work in cooperation with Zim-AIED using their own funding. To ensure sustainability after conclusion of the Zim-AIED program, Agritex field staff are engaged in all the training activities as co-facilitators. Direct technical assistance to companies buying from smallholders became increasingly important this year as the volume of transactions increased prompting the need for sound transactional arrangements, production credit, and signed contracts.

In addition to the crucial role of business training, commercialization requires a range of other specific business-related interventions that are monitored through six FTF indicators summarized below.

3.5.1 Technical Assistance and Training

FTF 4.5.2-11 Number of food security …organizations… receiving USG assistance

The program provided technical assistance to 945 organizations, mainly AgriTrade borrowers, producer associations, and irrigation management committees (IMC). A total of 135 IMC members from Moza and Tuli-Lushongwe (Matabeleland South), Mutema, Chibuwe and Musikavanhu (Manicaland) irrigation schemes received training and technical assistance in conflict resolution, performance review, action planning, group duties, management of group infrastructure, cash record keeping, marketing, and management. Another set of 62 IMC members from Chitora, Chipo and Gwiranenzara in Mashonaland East and Exchange and Ngondoma Irrigation Schemes in Midlands realigned management structure and responsibilities to expedite the implementation and management of irrigation infrastructure maintenance funds for their respective schemes.

To promote a farmer-led extension system that builds a permanent knowledge and skills base in the communities, 86 lead farmers from Honde Valley, Mutema, and Chibuwe (Manicaland) irrigation

schemes were trained on keeping cash records. Lead farmers receiving training and technical assistance are expected to cascade this knowledge down to their peers. Another set of 22 lead farmers, managing the agribusiness hubs in Guruve, Mashonaland Central, were trained in facilitation skills to improve the quality of their extension delivery.

Group solidarity is important in group sustainability. One hundred and twenty seven (127) farmers from four farmer groups in Guruve, who self-financed their inputs in the 2013 season, were trained in basic accounting procedures to ensure effective accounting of both installments from farmers and inputs received from suppliers. Farmers that will self-finance their maize and sugar bean crops in the coming 2014 season have been linked to Windmill, an agrochemical supplier for bulk purchasing of fertilizer and herbicides. The four farmer groups started paying monthly installments to Windmill in May 2013 to ensure their inputs are secured on time. To date, these groups have managed to raise $35,000 (enough to purchase 50 tons of fertilizer) to cover their full input requirements for the 2014 season.

During FY2013, Zim-AIED partner FAVCO contracted 376 farmers to establish an additional 25 hectares of tissue-cultured bananas in Honde Valley. The farmers organized themselves into seven self-selected groups. Of note is Saruwaka, a 14 member women's group that signed contracts independent of their spouses. Despite this, the husbands have participated in all the group trainings to date – a good sign that the concept of farming as a family business is taking hold.

Farmer groups under FAVCO and Matanuska continued to receive training on credit and contract management to ensure they maintain effective, long-term relationships with their commercial partners. In Nkayi, two management committees were set-up at Ezinyangeni and Dakamela nucleus breeding centers to supervise the day-to-day operations and roll out good animal husbandry practices to farmers.

In Mutoko and Murewa, farmer groups producing for export markets were trained in the benefit of using spray service providers to meet the minimum chemical residue requirements of target markets.

FTF 4.5.2-37 Number of MSMEs receiving business development services

During the period under review, integrated training and technical assistance was provided in agronomy, irrigation management, natural resource management, gender mainstreaming, marketing, postharvest handling, recordkeeping, budgeting, and contract management. A total of 50,278 MSMEs, of which 286 were AgriTrade borrowers, received business development services training from Zim-AIED and its implementing partners. Table 11 shows the breakdown of beneficiaries who received trainings in various business skills during FY2013. In all sessions, gender and environmental issues were mainstreamed and not reported separately.

Table 11: Beneficiaries receiving business skills training by subject

Subject	FY2013			To Date		
	Male	Female	Total	Male	Female	Total
Contract Management	846	970	1,816	1,277	1,463	2,740
Credit Management	1,039	1,336	2,375	5,353	5,914	11,267
Enterprise Budgeting	1,940	2,121	4,061	8,616	9,077	17,693
Farmer Group Organization & Management	1,098	1,180	2,278	3,634	3,968	7,602
Record Keeping	1,413	1,790	3,203	4,763	7,152	11,915
Collective /Group Marketing	728	578	1,306	939	896	1,835

An example of a typical business intervention would be the input suppliers' day held at the Chitora Irrigation Schemes in Mutoko district, where Zim-AIED is working with farmers to produce horticulture crops for both the domestic and export markets. The program's field staff noted that

one of the main constraints facing these farmers was access to the recommended inputs. Available stock from the local agrodealers is often limited and consists of cheap, purple-label pesticides that do not comply with international standards. The Input Suppliers' day provided opportunities for local agricultural companies (supplying products such as fertilizer, pesticides, spray equipment and vegetable seeds) to interact with the farmers and market products that are GlobalGAP compliant, thus introducing new labor-saving technologies.

In addition, the day provided an opportunity for linking local agrodealers with input suppliers and interested banks. As a result of this initiative, one local agrodealer, Lindsay Mushamba now operates as an agent for Prime Seeds and Intercrop, stocking vegetable seeds and recommended pesticides as well as high-quality fertilizer from Omnia. Mushamba's business now sells key agricultural inputs and household supplies to farmers beyond the district. Mushamba has also given farmers the option to pay for inputs with commodities such as maize and sugar beans, providing a viable alternative to many cash-strapped farmers.

Integrating the understanding of GAPs as good business practices can be seen through the example of Zim-AIED's promotion of herbicide use. Zimbabwean smallholder farmers, especially women, spend up to 75 percent of their time weeding. Inefficient weed control in the first four weeks can potentially reduce maize yields by 30-40 percent. Farmers often hire manual labor to control weeds but the labor costs are $50 per hectare while herbicides come to only $20 per hectare.

Credit management and enterprise budgeting were emphasized during the second and third quarters of FY2013 considering the low input recovery rate experienced in the last season. All farmers that received credit in FY2013 participated in these trainings. The aim was to foster good business ethics for sustainable business relationships in both the input and output markets.

Mixed results were obtained in the repayments of recoverable grants from farmers across the different PFAs. Farmers growing Tabasco and ABE chilies achieved 100 percent loan repayment while those growing staple products and paprika achieved repayments of 25 and 27 percent, respectively. Side marketing was cited as the main reason for farmers' failure to repay.

Zim-AIED collaborated with three microfinance institutions to train a total of 268 farmers in credit management with emphasis on group co-guarantees as a potential security option for receiving commercial loans. An additional 630 farmers received training on financial record keeping in preparation for direct lending from formal MFIs.

3.5.2 Investment

FTF 4.5.2-38 Value of new private sector investment… leveraged by FTF implementation

Implementing partners' new investments reported for the year totaled $1.36 million with 80 percent coming from AgriTrade borrowers. Zim-AIED's livestock partners invested a total of $30,015, including a $22,153 investment by Inala Enterprises to establish a meat wholesale market at Nkayi Centre as well as a borehole to provide water for livestock in the dry Dakamela area. O'Enem Meats, invested $7,680 in refrigeration equipment and refurbishment of its retail butcheries.

Matanuska invested a total of $50,417 in constructing two banana pack houses. Construction of the pack house at Mutema was completed during FY2013 while work at Chibuwe is currently 80 percent complete. The packhouses are set to maintain a high level of product quality and are equipped with proper postharvest handling facilities. Matanuska also acquired two electric platform scales worth $1,070 as a better alternative to hanging scales to ensure accurate weighing for bananas. FAVCO invested $18,793 in banana handling facilities.

Better Agriculture invested a total of $47,790 to enhance its chili processing facilities. In addition to the existing chili processing plant at Nyakomba, the company set up a second processing plant at Hauna Growth point in Honde Valley to process product from 155 contracted farmers on 39 hectares. Better Agriculture also invested in 31 solar dryers for African Bird Eye chili.

Many Zim-AIED beneficiaries have invested in livestock, small-scale farm equipment (such as irrigation pipes, water tanks, and pumps), and housing. One such farmer is Lindiwe Sithole, a 23-year old orphaned smallholder farmer in Mutema village in southern Manicaland. Sithole is one of the 240 smallholders producing tissue-cultured bananas for Zim-AIED partner Matanuska. From her 0.25 hectare banana plot she has harvested 14 tons of bananas worth $3,565. With this newfound income, she has already repaid $2,317 toward her capital and input loan of $3,165 and built a modest house.

In order to improve the flow of information flow between its head office and field staff, SAT invested in 48 tablet computers valued at $27,342 for its field-based staff. Real time information on program activities are now transmitted to the head office on a daily basis.

3.5.3 Profitability

FTF 4.5.2-43 Number of firms …now operating more profitably because of USG assistance

Through AgriTrade and business development interventions, Zim-AIED continued to focus on ways of making more money for more participants. A total of 14 AgriTrade borrowers, in particular those in livestock trading, have continued to increase profitability as indicated by the high rates of loan turnover.

Business development interventions focus on ways of making more money available to participants along the Zim-AIED intervention value chains. By continuing to advise banana farmers in Honde Valley and Chipinge on group formation, organization, and management, transaction costs of collecting bananas have remained low enabling FAVCO and Matanuska to increase the price paid to farmers to $0.32 to $0.34 cents per kilogram.

O'Enem Meats managed to increase the volume of slaughters in its abattoirs to 27 cattle herd per week, compared to zero when Zim-AIED intervened in October 2011. In addition, its 300-herd feed lot established during the year is now operating at 30 percent of capacity.

3.5.4 Employment

FTF 4.5-2 Number of jobs attributed to FTF implementation

Since inception, the Zim-AIED program through its partners created 1,224 FTEs along the different value chains it is directly involved in, with 194 new FTEs were created in FY2013 while 1,030 FTEs were continuing. A number of non-permanent on-farm jobs have been created through the implementation of the program mainly among banana, paprika, ABE chilies, and horticulture producers during the weeding and harvesting periods.

Zim-AIED partner Zero One created 34 new jobs to man its paprika buying points set up to purchase paprika from contracted and non-contracted farmers in Nyanga, Chipinge, Hurungwe, and Makoni districts during the five-month buying period. The strategy was to reduce marketing costs by grading and baling at buying points, use unique bale labeling for traceability, utilize a computerized purchase record system, and ship produce from these rural points to final destinations. This arrangement helped minimize aflatoxin contamination as field testing was done at the point of purchase. High aflatoxin levels cannot be accepted on international markets and lead to product rejection.

Another 68 new jobs were created at the farm level, including 46 farmers harvesting and grading bananas for Matanuska at the pack shed on the Mutema irrigation scheme.

3.5.4 Technology Adoption

FTF 4.5.2-42 Number of …organizations… that applied new technologies or management practices

At least 943 organizations adopted new management practices during the year. This includes the majority of AgriTrade borrowers with loans under $10,000 who are now keeping better

management and accounting records to conform to the terms of their loans. In addition, 18 irrigation blocks in Mutema, Chibuwe and Musikavanhu have elected new sub-committees to handle marketing issues for both inputs and outputs.

3.6 PRODUCTIVITY

The program's technical team and partner extension workers carried out productivity interventions in crop agronomy, irrigation, livestock management, and postharvest processing throughout the year. Focus was on the main target crops for FY2013 (maize, sugar bean, banana, and paprika) and secondary crops (groundnut, local and export vegetables, and sweet potato). The livestock team targeted cattle, pigs, and poultry, and integrated its activities more closely with traders borrowing from the AgriTrade facility and the agronomy teams working around irrigation schemes. Grants under The National Smallholder Technology Fund and sub-grants with Zim-AIED partners SAT, Prime Seed, Matanuska, FAVCO, Better Agriculture, Zero One Africa, O'Enem Meats and Inala Enterprises, provided additional technical and marketing resources to enhance productivity. Productivity increases are monitored by three FTF indicators, summarized below.

FTF 4.5.2-7 Agricultural sector training

During FY2013, 54,851 beneficiaries received short-term, specialized training and technical assistance in crop production, integrated pest management, postharvest technology. Training focused on GAPs customized for specific commodities and conditions.

Zim-AIED collaborated with the World Food Program (WFP) in conjunction with GrainPro, a private company, to establish Hermetic Storage Facilities (cocoons) around four Zim-AIED agribusiness hubs in Hurungwe (Mashonaland West) and Guruve (Mashonaland Central). The facilities will help farmers improve postharvest handling and storage of their grain. WFP intends to procure a minimum of 1,000 tons of maize and 200 tons of pulses (sugar bean and cow peas) from these agribusiness hubs. Sustainable Agriculture Technology (SAT), the Zim-AIED partner running the agribusiness hubs in these areas, provided continuous awareness training on the use and operation of the cocoons.

Zim-AIED and International Business Services Consulting conducted trainings on sweet potato processing into flour in Gutu utilizing mainly tubers unfit for the fresh market. Flour has a longer shelf life and is easy to handle. In addition, Zim-AIED linked sweet potato growers in Gutu and Gweru to Simfresh, an international sweet potato exporting company. Farmers also received training on production for the export market and postharvest handling.

Training and technical assistance was provided to sugar bean farmers on use of seed dressing, herbicide use for weed management, correct fertilizer application techniques, correct irrigation techniques, soil and water conservation, as well as safe use of agrochemicals. The majority of beneficiaries were from irrigation schemes in Manicaland, Matabeleland, and Midlands.

Calendarized livestock training focused on dosing, castration, vaccination, de-horning, supplementary feeding, forage conservation, recordkeeping, and marketing. Zim-AIED is using paravets and community-based animal health workers to disseminate health and management information to wider numbers of livestock farmers.

Working with the Department of Livestock Production and Veterinary Services, 59 paravets and community animal health workers at Dakamela Nucleus Breeding Center and Zinyangeni Nucleus Breeding Center in Nkayi district and at O'Enem Meats in Chiweshe communal area were trained in disease identification and in equipping basic veterinary kit that can be easily accessed. A total of 408 beneficiaries (168 men and 240 women) in Chiweshe and 169 beneficiaries (62 men and 107 women) in Nkayi were trained in livestock dosing, castration, vaccination, de-horning, supplementary feeding, recordkeeping, and livestock marketing.

In another collaborative effort with the Matopos Research and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Zim-AIED held three practical training sessions in three wards of Nkayi district on forage conservation technologies where 47 farmers were trained on hay making and using legume seed as cakes. Six forage demonstration plots established in the respective wards hosted these trainings.

FTF 4.5.2-2 Area under improved technologies

Based on end of year sample survey data, Zim-AIED beneficiaries applied new technologies and/or improved management practices to a total of 50,758 hectares during FY2013. This surpassed the target of 37,000 hectares by 38 percent. The high adoption rates are an outcome of the agribusiness hub concept, implemented now for two successive seasons, which has facilitated visual learning and hands on experience, thus increasing uptake of improved technologies by both new and continuing household beneficiaries. Total hectares under improved technologies were as follows:

- Crop genetics (hybrid seeds) – 35,865 hectares
- Pest management (IPM and safe use of pesticides) – 54,899 hectares
- Disease management – 29,114 hectares
- Soil enhancement (compost, contour ridges, crop rotation, inorganic fertilizer application, and mulching) – 103,619 hectares
- Water management – 42,382 hectares

Despite the weather challenges experienced in FY2013, yields from Zim-AIED beneficiaries were higher than national averages in maize, sugar bean and banana as a result of this high rate of adoption.

FTF 4.5.2-5 Farmers who have applied new technologies

Of the 122,823 households reached by the end of FY2013, 39,744 households adopted new technologies in FY2013 while 35,434 households continued to use technologies adopted in the previous seasons. Forty-eight percent of new technology adopters were women.

The use of tablet computers by field staff continued to improve the transfer of data and information, making it quicker to assess and recommend solutions to challenges faced by farmers.

Digital Extension in Agricultural Business Hubs

During FY2013, Zim-AIED equipped its field-based extension staff with Android tablets. Working through its development partner Sustainable Agriculture Technology (SAT), Zim-AIED distributed 47 Android tablets, 40 to the extension officers and seven to the supervisors under the agribusiness hub program.

Using the Android tablets, extension workers compile and present diagrams and photographs to help farmers grasp agricultural concepts. The field extension officers are also using the tablets to photograph handwritten attendance forms, commodity purchase reports, training sessions, and farmers' fields. These pictures are then uploaded to Dropbox (Internet based file storage) for retrieval by data technicians and other program staff. The officers are also reporting and sending spreadsheets of statistics quickly via email with this integrated cellular data device.

3.6.1 Staple Food Crops

National maize production has remained below the domestic demand for the last 10 years. FY2013 domestic maize production is estimated at 798,600 tons against an annual demand of 1.8 million tons. In FY2013, Zim-AIED targeted the commercial production of maize and other staples around agribusiness hubs in high potential areas and irrigation schemes. Working with commercial partner SAT, Zim-AIED established 40 agribusiness hubs in Murewa, Goromonzi, Gokwe South, Hurungwe, Mazowe, Guruve, and Gutu to drive productivity and market linkages of the main staples.

Each of the hubs comprised a central demonstration site for training and field days in a school, college, health facility or similar institution, as well as four additional demonstration plots within the area. These demo sites served as field "classrooms" where best practices to optimize productivity

were demonstrated and compared. The target crops were maize, soybean, groundnuts, sugar bean, cowpea, and sweet potatoes. Inputs for the lead farmer demonstrations were provided by Zim-AIED on a full cost recovery basis.

By establishing the hubs, Zim-AIED is encouraging both input suppliers and commodity brokers to travel to these areas, supply their inputs, and purchase produce in bulk. The farmers coordinate with the hub FEOs to set up itineraries that assist greatly in the production planning and marketing of their crops. Field days occur at different stages of the growing season. During field days, farmers hear from lead farmers and input suppliers about crop-related issues, participate in additional training, and seek business opportunities with interested buyers.

One of the most important aspects of the hub model is the private sector-driven nature of the training and extension services, which leads to established trading relationships that are sustained beyond the life of Zim-AIED. Input suppliers and buyers have had a hard time transitioning from dealing with the 3,000 large commercial farms that existed before the land reform to the one million smallholder farmers that exist now.

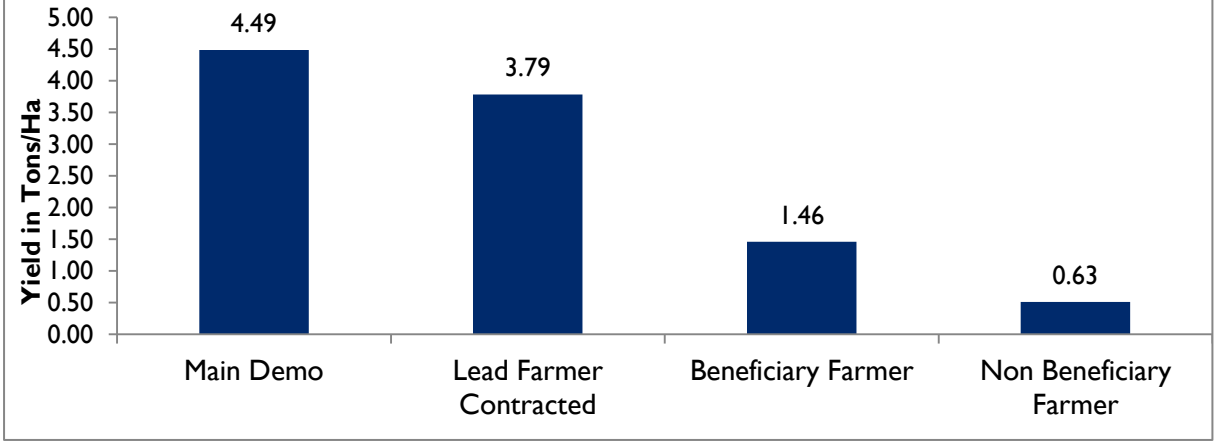
Technical assistance and training around the 40 hubs focused on:

- Business training in basic farming for profit, crop budgeting, marketing, and recordkeeping.
- Seed variety selection for all crops suitable for the area.
- Maize hybrid comparisons.
- Use of herbicides to reduce labor demand for weeding.
- Safe and effective use of insecticides and fungicides (agro-chemicals).
- Irrigation management.
- Commodity marketing.
- Contract management.
- Continuous monitoring of yield improvement and returns.
- Practical training in planting techniques, weed control, plant nutrition, integrated pest management and disease control, safe use of agrochemicals, and crop husbandry.
- Postharvest storage and quality control.

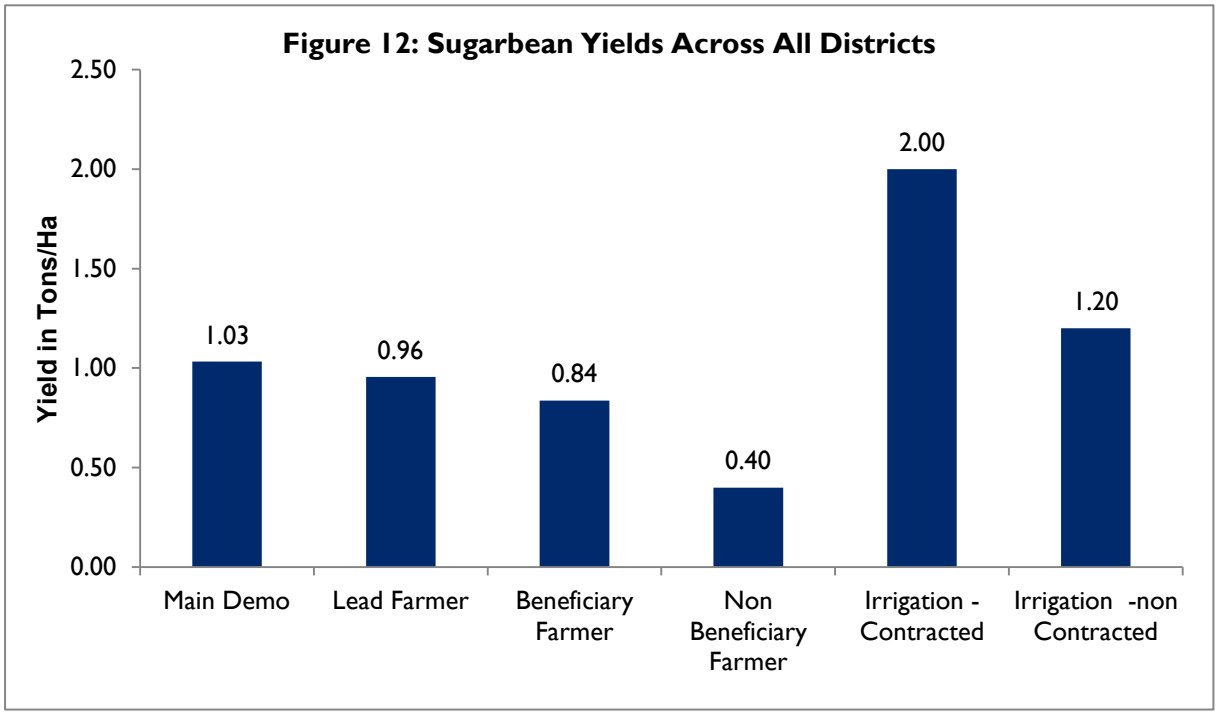
The program trained 30,000 farmers in good agricultural practices, including linking them to markets around the 40 agribusiness hubs.

By adopting basic techniques of selecting the best variety for the area, planting early, correcting soil pH through liming, applying optimum fertilizer and controlling weeds, Zim-AIED agribusiness hub lead farmers were able to achieve maize yields higher than the national average of 0.63 tons per hectare (Figure 11).

Figure 11: Maize Yields on Zim-AIED hubs Across All Districts



There was a significant difference in maize yields between Zim-AIED beneficiaries and non-beneficiaries in all project areas. Zim-AIED trainings focused on good agricultural practices such as variety selection, early planting, weed control, and fertilizer application. Commercial linkages were established with input suppliers and commodity traders, including AgriTrade borrowers, at most of the agribusiness hubs where buyers met with growers to set up buying points. Across all districts, Zim-AIED-assisted farmers achieved at least twice the yields in maize as non-beneficiaries in the same districts.

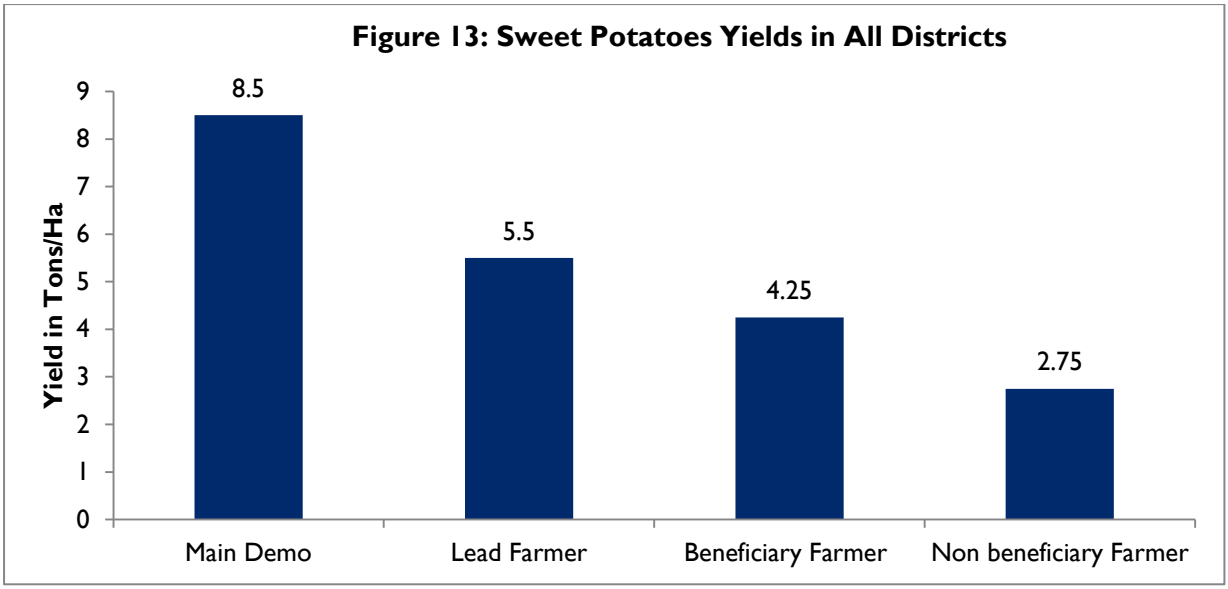


There was a significant difference in yield between the Zim-AIED beneficiaries and non-beneficiaries in all sugar bean growing areas. Technical assistance to sugar bean growers was provided on irrigation schemes in Manicaland, Matabeleland South, and Midlands as well as in the dryland sites of Hurungwe, Mazowe, Guruve and Goromonzi.

Zim-AIED partnered with Matanuska to contract 680 farmers at Mutema and Chibuwe irrigation schemes in southern Manicaland to grow 205.8 hectares of sugar beans. Two hundred and seventy four farmers (274) were contracted to grow 62.5 hectares of sugar bean seed by Pannar Seeds at Mutema. Those who grew sugar bean as seed were given treated seed from Pannar. All non-seed growing farmers supplied their own chemicals and seed and received fertilizer on loan from Zim-AIED through Matanuska. Production was 1,558 tons from the two schemes with Mutema farmers generating $397,100 and Chibuwe farmers $1.47 million in sales. Sugar bean production rose by more than 72 percent compared to 902 tons produced on the two schemes in FY2012.

High yields were due to farmers receiving training and technical assistance on good agricultural practices, use of good seed, and herbicides. Average yields for contracted farmers was 1.8 tons per hectare compared to 1.0 tons for the non-contracted crop. The contracted farmers achieved gross incomes of $1,564 compared to the non-contracted farmers' of $890 as most did not have adequate inputs.

A total of 3,850 farmers grew sweet potatoes in Gweru District, Midlands and 356 farmers in Gutu, Masvingo. One hundred and fifteen hectares were planted in Gutu and a total of 338 hectares were established in Midlands. Twenty-five demonstration sites were set up in Gweru and Gutu to showcase good agricultural practices in sweet potatoes and promote the use of improved virus-free planting material, ridging, fertilizer, and carbaryl to control sweet potato weevil.



Average yields for Zim-AIED assisted farmers were around 4.25 tons per hectare compared to 2.75 tons per hectare for non-beneficiaries. Yield assessment on demonstration plots hosted by farmers in Gweru showed a yield range of 7.8 to 10.2 tons per hectare while the highest yield was recorded in Gutu at 15 tons per hectare mainly due to supplementary irrigation, reduced weevil damage from the use of carbaryl, and the application of Compound S fertilizer.

The poor rainfall distribution season affected performance and area established under the crop. Sweet potatoes will contribute the highest income for targeted staple crops at $1,488 per hectare with maize being the least at $281.

3.6.2 Paprika and Chilies

Zim-AIED estimates that Zimbabwe's paprika production for the 2012-13 season is around 820 tons of which 90 percent is from smallholder farmers. For FY2013, Zim-AIED only encouraged paprika production in FTF focus areas with high potential for the crop, mainly Manicaland (Nyanga, Headlands, and Chipinge) and Mashonaland West (Hurungwe).

Training and technical assistance was provided to all paprika growers in the focus areas. Productivity interventions included agronomic trainings and technical assistance in production of good quality disease free seedlings, transplanting methods, good fertilizer application, and correct spacing to achieve optimum plant population, disease, and pest control, safe use of pesticides and good postharvest handling where Zim-AIED trained 1,413 farmers. In conjunction with the BDS team, a total of 1,250 paprika farmers were trained on contract management, enterprise budgeting, and farmer group organization.

Zim-AIED assisted 824 smallholder paprika farmers, contracted to partner Zero One Africa, with input loans on full cost recoverable basis. These assisted farmers grew 357 hectares and produced 570 tons of paprika. Zim-AIED further supported Zero One Africa to roll out a new marketing model where 15 buying paprika points and four paprika warehouses were set up in the four focal paprika production areas of the country: Nyanga, Chipinge, Hurungwe, and Makoni (Headlands). Under the model, each buying point was equipped with a scale, manual baling boxes, and presses to bale graded paprika ready for export. Unlike the previous years where paprika was transported to a central site and re-graded for export, paprika was graded, pressed into 90 to 100 kilogram bales, packaged in recommended polypropylene material, and transported to the market directly from these rural areas. This model reduced the buyers' operational costs through the elimination of double handling and lower transport costs and created 56 jobs or nine FTEs in the rural areas.

Table 12: Smallholder farmer paprika production for 2012-2013 season

		Input Supported Farmers				Unsupported Farmers				Total Farmers			
Province	District	# of Farmers	Area (ha)	Yield/ ha (t)	Total (t)	# of Farmers	Area (ha)	Yield/ ha (t)	Total (t)	# of Farmers	Area (ha)	Ave yield/ ha (t)	Total (t)
Mashonaland West	Hurungwe	221	115	1.1	127	459	59	0.7	41	680	174	1.0	168
Manicaland	Makoni/ Headlands	71	36	1.1	40	269	49	0.6	30	340	85	0.8	70
	Nyanga	470	194	2.0	388	1,077	199	1.0	201	1,547	393	1.4	555
	Chipinge	62	12	1.5	18	-	-	-	-	62	12	1.5	18
	Mutasa	-	-	-	-	55	10	0.6	6	55	10	0.6	6
Mashonaland East	Marondera	-	-	-	-	60	15	0.6	9	60	15	0.6	9
Total/ Average		**824**	**357**	**1.6**	**573**	**1,920**	**332**	**0.6**	**364**	**2,744**	**689**	**1.2**	**826**

Source: CIRIS

The average paprika yield in dryland conditions dropped from the projected 1,300 kilograms per hectare to about 1,000 kilograms per hectare due to the short rainfall period. The 2012-13 rainfall season ended early (mid-January instead of the end of March) in most parts of the country. The irrigated crop achieved higher average yields, estimated at 1.7 tons per hectare.

Zim-AIED technicians and Zero One Africa field officers trained 966 farmers on good postharvest handling practices and proper grading of paprika – key value addition activities in the paprika value chain since prices are based on product grade. Value addition of the product was supported by encouraging farmers to purchase poly sheets for hygienic drying of their paprika to reduce the incidence of aflatoxin and dust contamination in the final product. Zim-AIED supported the 824 contracted farmers with adequate poly sheets on a cost recovery basis. On average, 70-80 percent of the harvested crop was grade A. Laboratory tests showed that the ASTA score for the purchased paprika was between 220 and 460, which indicates a good quality crop. Aflatoxin levels in the product were within the internationally acceptable range.

Table 13 Paprika purchase volumes by commercial buyers

Commercial buyer name	Quantity purchased (tons)
Hyveld	398
Zero One Africa	108
Spaprika	65
Pure Seasons	120
Others	60
Total	**751**

An estimated 826 tons were available in the Zim-AIED focus areas. The paprika purchase price of $1.30 per kilogram of 'A' grade paprika offered by Zero One Africa to farmers, was lower than other competing buyers' prices of $1.50 to $1.70 and led to side marketing of the product by contracted farmers to other buyers offering higher prices. Zim-AIED also collected data on purchases of paprika from other players (Table 13).

Two local spice companies bought 100 tons of paprika for value additive processing into different spice mixes. The balance of about 650 tons was exported to Spain, Germany, and South Africa.

Zim-AIED partner, Better Agriculture contracted 331 farmers in Nyanga and Honde Valley to grow 73.5 hectares of Tabasco chilies. The company supplies Tabasco chili to the Chili Pepper Company in South Africa, agents for McIlhenny and Company (USA), the producers and owners of the Tabasco sauce brand. USA is the export market for the Tabasco chili produced. One hundred and seventy six of these farmers grew the crop at Nyakomba Irrigation Scheme (Nyanga, Manicaland) under irrigated conditions and 155 of the farmers grew the crop under rain-fed conditions in Honde Valley (Mutasa,

Manicaland). Zim-AIED provided regular trainings and technical assistance focused on timing of harvesting and proper grading of produce.

Farmers at Nyakomba Irrigation Scheme achieved average yields of 5.3 tons per hectare which are comparable to the target yield of 5 tons per hectare (Table 14). Eleven percent of the farmers at Nyakomba achieved yields higher than 10 tons per hectare mainly due to early planting and adopting good agricultural practices. Honde Valley farmers, all under rainfed conditions, achieved average yields of 1.65 tons per hectare against a target of 4 tons. Lower yields were due to the late planting as a result of the late onset of the rains and the long dry spell which extended from mid-January to end of February 2013.

Table 14: Tabasco chili and ABE chili production in FY2013

Crop	Province	District	# of farmers	Area under production (ha)	Yield (kg/ha)	Total production (tons)	Revenue	Cost of production	Gross margin/ ha
Tabasco Chili	Manicaland	Nyanga	176	36.4	5.33	193	$113,870	$22,604	$2,507
		Honde Valley	155	38.8	1.65	64	$37,760	$31,040	$173
Total			331	75.2	3.42	257	151,630	$53,644	$1,303
ABE Chili	Manicaland	Mutare South	29	8.0	1.74	13.95	$11,578	$6,400	$647
	Masvingo	Chiredzi	16	8.0	7.30	58.38	$48,455	$6,400	$5,257
Total/Average			45	16.0	4.52	72.33	59.930	$12.800	$2,945

Source: CIRIS

Tabasco chili farmers earned an average of $0.59 per kilogram for the wet chilies. Gross margin per hectare was $2,505 for the irrigated crop at Nyakomba and $185 per hectare for the Honde Valley dryland crop (Table 14). Low yields and higher production costs (higher requirement of fertilizer and lime) was the main reasons for the low gross margins in Honde Valley.

Better Agriculture set up two processing plants, one at Nyakomba Irrigation Scheme in Nyanga and another at Hauna growth point (a business center) in Honde Valley. Better Agriculture processed and exported 257 tons of Tabasco chili to the Chili Pepper Company in South Africa, for onward export to the United States. Of this, 193 tons was from Nyakomba Irrigation Scheme and 64 tons from Honde Valley.

Better Agriculture contracted a further 45 farmers to grow a total of 16 hectares of African Birds Eye (ABE) chilies at two irrigation schemes in southern Manicaland and Masvingo. The farmers planted between 0.2 and 0.5 hectare each in December 2012 and a total of 72.33 tons of wet ABE chili was produced (equivalent to 50 tons of dried chilies). Better Agriculture paid farmers $0.83 per kilogram for the wet chilies.

The international restaurant chain and processor, Nando's South Africa, had an off-take agreement with Better Agriculture to supply 50 tons of dried chilies in 2013 for the manufacture its specialty Nando's sauces. Fourteen new solar dryers, seven at each site, were installed to process the ABE chilies to meet market quality specifications

Average yields of 7.29 tons per hectare of wet ABE chili compared to the target of 3 tons per hectare were achieved in Masvingo (Tshovani, Chiredzi), giving the farmers gross margins of $5,256 per hectare (Table 14 and Annex 1). The growers attribute the high yields to the higher average temperatures, good agricultural practices, and their readiness to apply new techniques learned from training and technical assistance. In contrast, Chipendeke Irrigation Scheme (Mutare district, Manicaland), which is at a higher altitude achieved lower average yields of 1.7 tons per hectare

mainly because of the lower temperatures, low plant stands, poor weed control and intermittent water shortages at the scheme.

Sixteen farmers from Chipendeke participated in a "look and learn" tour to Tshovani Irrigation Scheme (Chiredzi district, Masvingo) and learned good agricultural practices such as optimum plant population, weed control, correct timing of fertilizer, and water application.

ZimSpice, a local spice manufacturing company contracted 24 farmers in Murewa (Mashonaland East) to grow 1.2 hectares of chilies for local processing into spices. With Zim-AIED assistance, the selection process of farmers for the chilies was thorough as only those farmers who had repaid loans received from MicroKing were contracted. Each farmer received 200 grams of seed from ZimSpice and the 24 farmers were trained on crop budgeting, seedbeds, and nurseries by Zim-AIED. Farmers sold 1,787 kilograms of chilies to ZimSpice at $1.80 per kilogram.

3.6.3 Horticulture: Bananas

Zim-AIED's main intervention in bananas is through two leading commercial banana distributors FAVCO and Matanuska in Mutasa District (Honde Valley) and Chipinge District (Mutema, Musikavanhu Irrigation Schemes) respectively. In FY2013, Zim-AIED initiated some direct interventions in Rusitu Valley (Chimanimani District) and Lukosi Irrigation Scheme (Hwange District) where over 300 tissue-cultured banana seedlings were planted in September 2013 as part of the first of six demonstration plots on Matabeleland irrigation schemes, designed to show farmers that bananas could provide income as well as food security for the households if grown correctly with good agricultural practices.

Honde Valley

In Honde Valley, FAVCO and Zim-AIED are working with 2,000 smallholder farmers to train farmers on improving crop husbandry practices on the mature plantations; provide postharvest technical assistance to raise quality standards and consolidate products for marketing; and giving input support, training, and technical assistance in good agriculture practices to the farmers growing 50 hectares of tissue cultured bananas. More than 70 percent of the contracted farmers faced challenges of irrigated water supply between September 2012 and the onset of the rains in December 2012. The farmers were advised to intensify field mulching to conserve the available water. Two hundred and thirty farmers (230) of the farmers who received tissue-cultured bananas started harvesting their plantations in August 2013.

The performance of the Honde Valley banana crop during FY2013 showed some marked improvements in terms of both production and quality although FAVCO's sales do not reflect this as they lost market share to competitors at certain times of the year. Table 15 shows banana purchases by FAVCO from Honde Valley smallholder farmers since September 2011.

Table 15: FAVCO banana purchases

Year			TOTAL	
	Tons	Value ($)	% change in Tons	% change Value
2011	305	74888	**0**	**0**
2012	911	269651	**298**	**360**
2013	823	258123	**-9**	**-4**

Quantity purchased dropped by 10 percent and the value also dropped by 4 percent compared to 2012. The severe dry weather conditions at the onset of the production year resulted in many water sources drying up, negatively affecting both the performance of the mature crop as well as retarding the growth of the tissue-cultured plantings. This combined with FAVCO's tightening up on quality standards and increased competition from competitors contributed to reduced purchases.

Small-scale consolidators who buy at the low end of the market also increased their prices from $0.10 per kilogram to $0.25 per kilogram, which encouraged farmers growing low quality rainfed bananas to supply them. Increased competition saw competitors offering farm gate prices as high as $0.40 per kilogram. Many competitors were paying on the spot and putting more pressure on

FAVCO to do the same. Zim-AIED has been assisting FAVCO to regain its buying position and a real turn around was observed when harvesting of TC bananas commenced in August 2013.

The harvesting of the contracted crop improved the supply of bananas to FAVCO by an average of 46 percent in the fourth quarter of FY2013 compared to the same quarter in FY2012. Purchases from contracted smallholder farmers were 20 percent of the expected crop by the end of September 2013. Average yield projections are 36 tons per hectare and some crops could achieve yields in excess of 70 tons per hectare. Noted was a significant improvement in the quality of bananas attributable to the tissue-cultured crop, and for September 2013, all of the 80 tons supplied achieved the top grade. This is now motivating farmers to increase the attention given to bananas.

Loan repayments have improved for the producing group of 230 farmers because of the increased supply of tissue-cultured bananas and the implementation of the stop order deduction scheme. By the end of September 2013, $25,810 (29 percent) had been recovered from the total loan of $86,677. The percentage of farmers whose loans were below $50 increased to 9 percent with those below $100 increasing to 19 percent by the end of September 2013. Zim-AIED is optimistic that all the 230 farmers will clear their loans by December 2013 with most of the repayments coming in October and November of 2013. There has been some success in mobilizing new groups of farmers who received seedlings this year to start repaying from their old plantations and by the end of September $1,000 had been repaid. Extension of the stop order system to new groups by FAVCO has also improved repayments.

Throughout the year, FAVCO struggled with the ever-increasing competition and Sunspun, one of the country's biggest banana wholesalers, moved into Honde Valley and began targeting areas where Zim-AIED had trained farmers who consolidated their produce. Most competitors are paying farmers cash at the farm gate, eliminating market risks (transport, weight loss variances, and crop downgrading at final market). FAVCO also faced logistical challenges with moving the purchased quantities and purchased additional bulk bins and lug boxes to handle the crop. The tractor, which Zim-AIED pre-financed in 2011 to help in transporting produce from inaccessible areas, was overwhelmed with work and the partner combined each group's harvests so that the largest possible truck would take at each loading.

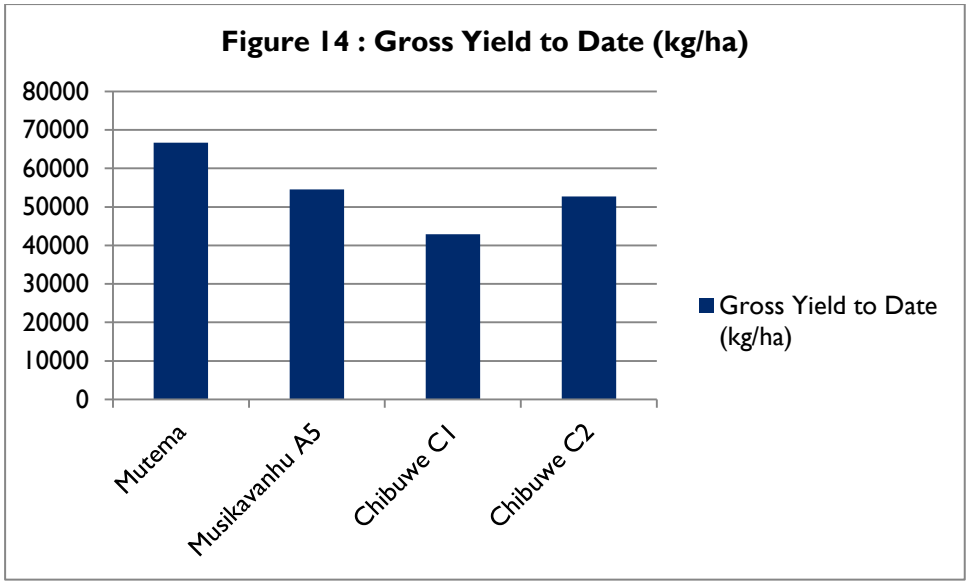
Mutema/Chibuwe/Musikavanhu

Zim-AIED commercial partner Matanuska – a specialist banana production and marketing company, is working with 440 contracted farmers in Mutema, Chibuwe, and Musikavanhu irrigation schemes in Chipinge district in southern Manicaland. The area had never experienced banana farming before. The operations involve the production of tissue culture bananas on 100 hectares of land – 60 hectares in Mutema with a micro jet irrigation system (funded by loans arranged by Zim-AIED to cover tissue plants, working capital, and CAPEX), while 40 hectares under flood irrigation system are in the Chibuwe and Musikavanhu schemes.

Each farmer has 0.20 to 0.25 hectares, planted cooperatively in 10-20 hectare blocks to take advantage of the latest techniques and technologies in banana production. Matanuska and Zim-AIED technicians are supplying specialist technical assistance on agronomy and business development to the growers.

Farmers harvested 67.6 hectares with the balance in different stages of maturity. A total sales value of $657,787 was realized from the sale of 2,121 tons. By September 2013, farmers at Mutema Irrigation Scheme had harvested almost the entire first planted crop and harvesting of the first ratoon crop had commenced on some blocks. At Mutema and Musikavanhu A5 block farmers had harvested more than 85 percent of their first crop.

Mutema and Musikavanhu A5 block farmers realized between $2,200 and $3,300 per farmer in gross sales, while some individual blocks in Mutema realized up to $5,000 per farmer in sales value during the first harvest of bananas (February 2013-May 2013).



The micro jet irrigation system at Mutema contributed to sustaining high yields of more than 60 tons per hectare while minimizing salinization and water waste (see Figure 14). The other flood irrigation schemes averaged more than 40 tons per hectare, which was exceptional for the first harvest.

Matanuska constructed one pack shed at Mutema, which was operational during the period under review, with the second one at an advanced stage in Chibuwe. The harvesting and selling process proceeded fairly well and complaints from farmers were minimal.

A major issue was the repayment process where some farmer groups failed to grasp the financial details of the arrangement. However, most farmers accepted the arrangement once harvesting commenced. The major misconception was the farmers' interpretation of the 65:35 repayment ratio, which they initially misunderstood as an interest rate.

Loan repayments at the end of the reporting year were $345,783, and $105,234 was paid to Zim-AIED. This represents 13 percent of the outstanding balance of $781,757.

Efforts for MicroKing to take over Zim-AIED debt with the farmers suffered a setback as the exercise was postponed due to the reorganization of the parent company Kingdom Bank as a result of new shareholding. Farmers had welcomed the introduction of MicroKing.

Following the commencement of banana harvests in all sites of Mutema and Chibuwe, farmers outside the banana project have realized the profitability of the venture and there is growing demand from these to join the scheme.

Inadequate harvesting resources including packaging and tractors to ferry produce to the pack shed affected the smooth running of operations and have led to a few incidents in which Matanuska failed to harvest and purchase bananas on time, resulting in fruit ripening in the fields.

3.6.4 Local Horticulture

Local horticulture crops are grown for home consumption and cash by many smallholder farmers because they produce high returns per unit area. Most are grown and hand watered on small areas around the home, but, with the right conditions and techniques, production can be scaled to commercial levels. During FY2013 Zim-AIED took major strides in working with smallholder farmers on irrigation schemes in Matabeleland and Mashonaland East to commercialize their horticulture production. Work is still in progress with the Midlands schemes since the subcontract with CARE ended in September 2013. The main interventions focused on brassicas (kovo, rape, cabbage and kale), butternut, onions, table potatoes, and tomato. The objective is to make these schemes viable

as part of commercializing smallholder farmers. Many of these schemes are in low rainfall areas, so money generated from crop production forms the main source of income for smallholder farmers.

Zim-AIED engaged farmers directly, and established 169 demonstration plots to showcase good agricultural practices after identifying commercial partners to ensure sustainable market linkages. Partners who bought produce from the smallholder farmers include FAVCO, MARS, DG Patel, Food Lovers Market, Greens Supermarket, Selby Fresh, Harare Produce Sales, Sandefer Investments, and Willowmead Junction.

Figure 15 and 16 illustrate the increase in yields obtained at Silalabuhwa and Tshongokwe demo plots versus the traditional farmer practices.

Figure 15: Yield increases at Silalabuhwa demo plots

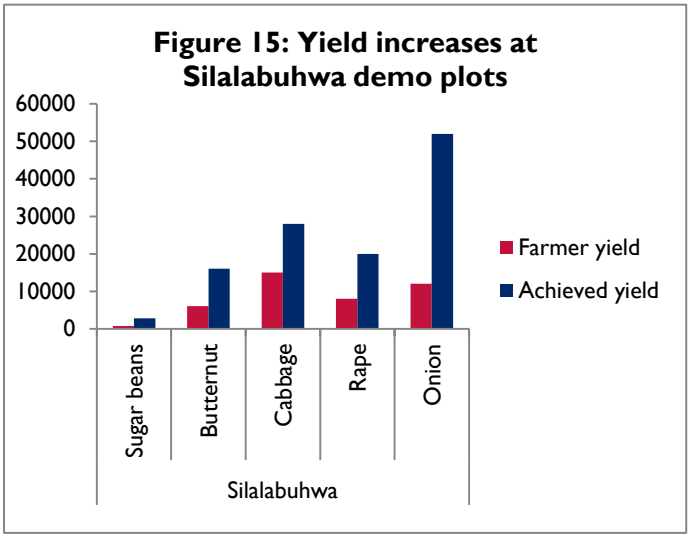
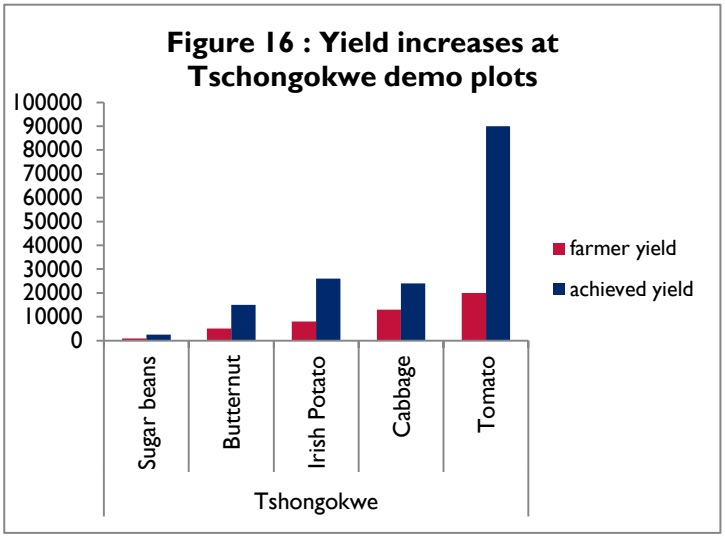


Figure 16 : Yield increases at Tschongokwe demo plots



Developing the irrigation schemes into viable agribusiness hubs require a multifaceted approach involving all stakeholders including government (AGRITEX), parastatals (ZESA and ZINWA), input suppliers, rural agrodealers, fresh produce markets, and microfinance institutions. The Zim-AIED team has engaged these stakeholders to address constraints facing the smallholder farmers on the schemes including market access, input availability, and access to credit. The approach adopted was as follows:

- The Zim-AIED agronomy team identified strong markets, established demonstration plots for new high-value crops and provided training and technical assistance on good agricultural practices, safe use of pesticides, postharvest handling, and value addition where necessary. On every occasion, Zim-AIED collaborated with Agritex officers ensuring long-term sustainability and improved capacity for technical support. Zim-AIED also identified rural agrodealers and linked them to large commercial input suppliers.
- Zim-AIED's business development services team provided training and technical assistance on leadership skills, constitutional related issues, basic budgeting, and break-even analysis, and contract negotiations strengthening the IMCs and empowering the farmers.
- The Zim-AIED team provided technical assistance to farmers in resolving operational issues, trained farmers on the importance of setting up repairs and maintenance funds in water management, and successfully facilitated farmers' interactions with ZESA and ZINWA.
- The AgriTrade team pre-selected smallholder farmers and agrodealers to receive assistance from microfinance institutions such as MicroKing and Untu Capital.

This holistic approach has been a key part of the successes achieved during the year. Keznet Moyo, a lead farmer at Tshongokwe Irrigation Scheme in Lupane in Matabeleland North said, "Zim-AIED has introduced this new technology to meet our production needs and allow us to make more money and progress as farmers."

During FY2013, Zim-AIED engaged a consultant to work with smallholder farmers in the Murewa wetlands area producing crops mainly for the domestic market. The consultant worked closely with four farmer groups (Kabayanzara, Mavanze, Ever-green, and Ngomamowa). Farmers learned best production practices for tomatoes, onions, and carrots. Many of the farmers attending the trainings applied these practices and achieved yields of 70 tons per hectare. Two market visits were arranged where 40 lead and influential farmers visited five buyers in Harare to expose farmers to different quality standards and link them to the more formal markets.

Findings from the consultant useful for future programming were:

- It was difficult to get smallholder farmers to plant their crops sequentially to ensure continuity of supply. Village level politics undermined efforts of associations to organize their members to adhere to planting programs.
- The need for value addition at the local level would help in creating employment and diversifying the market. The consultant identified a local agrodealer who is prepared to start a small horticultural pack house to buy produce from the farmers, adding value through weighing and packaging product before selling to the formal markets as well as developing the lucrative Mutoko road side market at Cross and Murewa turn off. However, one of his biggest hurdles was getting continuous supply.
- The need for basic technical bulletins on horticulture production. The consultant produced a series of basic handouts in the local languages, which have been well-received by the farmers.

The focus for local horticultural production over the next fiscal year is to strengthen the linkages with microfinance institutions so that farmers can access credit for inputs and apply new technologies. These technologies include use of improved varieties (Rodade plus), application of appropriate fertilizers according to soil analysis results, trellising, and weed control.

Activities around the irrigation schemes will also incorporate a larger number of livestock interventions such as fodder crop production and use of crop stover to provide more nutritious feed supplements to livestock.

3.6.5 Export Horticulture

Zim-AIED continued to engage stakeholders in the horticulture industry to develop export opportunities for smallholder farmers in mange tout, sugar snap peas, green beans, gooseberries, and cherry peppers on irrigation schemes and wetlands in Murewa and Mutoko districts in Mashonaland East. Although the numbers of beneficiaries have remained small, recent developments in the region have stimulated enthusiasm among exporters despite the continued liquidity challenges.

Photo by Fintrac

Smallholder farmer Richard Muchinyura and his sons grade mange tout and sugar snap peas for delivery to Harare.

During the reporting period, Zim-AIED partnered with Selby Fresh, Lonrho Agribusiness, and Vegieflora to promote the production of cherry peppers, fine beans, mange tout, and sugar snap peas for export by smallholder farmers.

Selby Fresh contracted 55 smallholder farmers in Murewa and Chitora Irrigation Schemes to produce cherry peppers. Selby provided seedlings but no other inputs. An AgriTrade loan covered the costs of inputs and labor. Selby also provided logistical support through crates and

transportation. Only 26 of the original 55 contracted farmers sold produce to Selby. Flooded lands, crop neglect, and lack of labor for harvesting were some of the reasons for this poor performance. A total of 10.2 tons of fresh cherry peppers were delivered to Selby with 49 percent grade out and close to 3 tons kept on farm or sale as dried pepper.

Lonrho Agribusiness contracted 43 farmers in Mutoko district on four irrigation schemes, namely, Nyaitenga, Chitora, Chipo, and Gwiranenzara to grow fine beans for export. Lonrho provided inputs on a cost-recovery basis, as well as technical and logistic support. Farmers will begin harvesting in late October 2013.

Vegieflora is a small horticultural export company that provides a market for mange tout and sugar snap peas looking to contract at least 50 producers. Unfortunately, due to financing challenges, only 28 smallholder were able to produce the desired crops. Thirty-three percent of the farmers did very well having the capacity to purchase the correct pesticides, hire labor when required, and provide sufficient irrigation throughout the growing period. One farmer achieved a net exported yield of 14 tons per hectare (75 percent higher than any large-scale producer) and was able to purchase a grinding mill with the profits earned. Another 33 percent of the farmers failed to hire labor for harvesting and, although they made a small profit, were unable to benefit from the full potential of the crop. The final 33 percent faced irrigation challenges and the crop did not perform well.

In all cases, Zim-AIED continued to provide technical and managerial support to the farmers. Training events in good agricultural practices and integrated pest management centered around 28 demonstration plots. Zim-AIED also arranged input buyers' days to help farmers engage with input suppliers providing a wide range of agricultural inputs, including irrigation equipment, protective clothing, spraying equipment, seed, fertilizers, and pesticides.

Zim-AIED will continue to explore new financing options for smallholder horticulture producers, identify and work with exporters, and provide technical assistance and training to capitalize on the upsurge in market demand for export vegetables from Zimbabwe from the UK and Dutch markets.

3.6.6 Value Addition

The Zim-AIED staples team worked with 515 sweet potato farmers in the Gutu, Masvingo where sweet potato is an important cash crop. The farmers in Gutu produced more than 500 tons of fresh tubers in 2013. The smallholders sold this produce through both formal and informal markets, especially on the Masvingo-Harare and Gutu-Masvingo highways at prices ranging from $0.60 to $0.90 per kilogram.

Zim-AIED trained 119 farmers in Gutu in value addition through proper grading and packaging of sweet potato and linked them to Simfresh International, a small South African company that exports the tubers to the UK. Zim-AIED trained another 116 farmers in postharvest handling and grading in Gweru district (Midlands).

Sweet potato processing into flour presented yet another channel for farmers to add value to their product and still earn income from the potatoes that failed to make the export grade. Zim-AIED trained 30 farmers in sweet potato flour processing and produced 150 kilograms of flour. A small private sector processor purchased 4,000 250-gram packets of the sweet potato flour to sell for confectionary use.

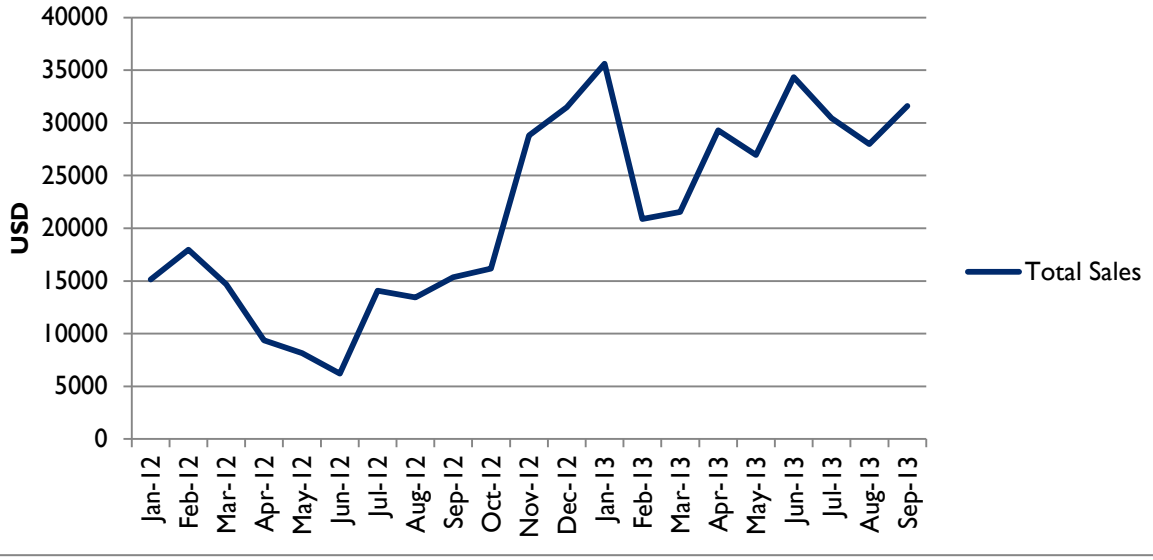
3.6.7 Livestock

The main activities in FY2013 focused on providing extension support, training, and technical assistance to smallholder farmers contracted to O'Enem Meat Products for supply of maize for animal feed; training smallholder livestock farmers on aspects of livestock nutrition, including fodder production and conservation; introducing new cattle breeds; and rehabilitating livestock infrastructure. Zim-AIED also linked livestock farmers to lucrative and sustainable markets through the O'Enem Meats abattoir in Chiweshe, the Inala Meat Market Centre in Nkayi and the regularly

organized cattle auctions around the livestock management centers in Nkayi in partnership with Inala Enterprises.

Zim-AIED ramped up the cattle loaning and leasing schemes under the Inala partner fund agreement to increase the number of livestock farmers accessing improved cattle breeds. Efforts continued to assist Comtex, a private livestock trader in partnership with O'Enem Meat Products to stock and manage the 300 head capacity feedlot to increase the abattoir throughput.

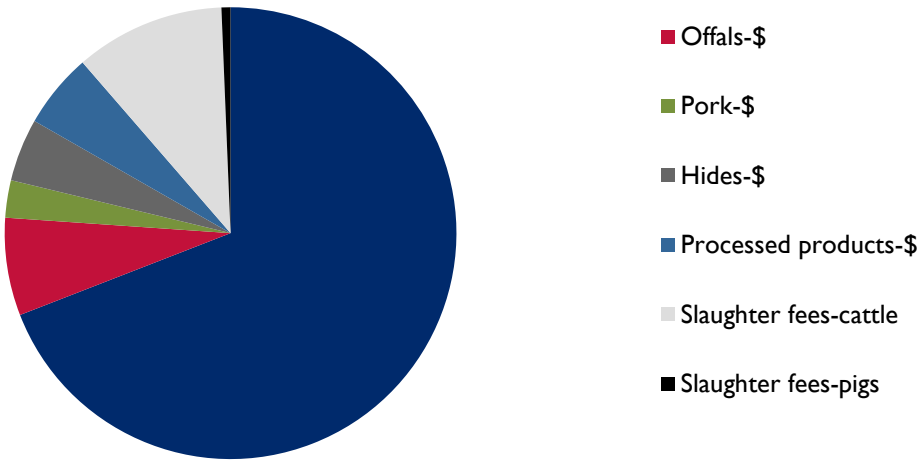
Figure 16: Total sales value from O'Enem Meats abbatoir: Jan 2012-Sept 2013



In Nkayi, a total of 950 (55 percent women) and another 2,400 (44 percent women) smallholder livestock farmers in Mashonaland Central were trained in different areas of livestock production, management, and marketing including good livestock husbandry, fodder production, feed conservation, and disease prevention and treatment. Zim-AIED offered these trainings in conjunction with the Veterinary Services Department, Livestock Production and Development (LPD), and ICRISAT. Para-vets also assisted in training of their fellow communities, proving to be an effective extension method.

The number of cattle slaughtered at O'Enem Meats increased from 510 to 1,377 over the last year, the number of pigs decreased from 412 to 120. This was largely due to the poor performance of the pig value chain nationally and the failure by the partner to restock the piggery unit. Capacity utilization of the abattoir remained low; this was typical of most manufacturing industries in the country this year. The total turnover from the abattoir was $335,130 compared to $103,754 in FY2012, an increase of 223 percent. Average monthly turnover was $27,593 compared to $12.703 per month in FY2012 (Figure 16). Beef continued to generate the greatest proportion of sales turnover.

Figure 17: Contribution to sales of beef, hides, pork offals, slaughter fees and processed meat products



The feedlot at O'Enem Meats continued to operate at 19.25 percent. During FY2013, 231 head of cattle went through the feedlot of which 89 percent were slaughtered by the abattoir yielding 30.7 tons of beef that were sold to Montana and AMP for a value of $129,140. Capacity utilization of the feedlot has remained low (19 percent) mainly because COMTEX has failed to raise enough working capital.

Zim-AIED facilitated the engagement of an independent accountant firm, Norvellus Chartered Accountant Consultancy to perform a complete business and financial analysis of O'Enem Meats for a 12 month period to help ensure the business' long-term stability, growth, and profitability. The first report in September 2013 indicates that the business is now on a profitable path, however it requires more working capital to grow. The working capital could be raised from additional credit as the firm's current gearing is relatively low (1:11.9).

Inala Enterprises, in partnership with Nkayi Rural District Council organized 32 auctions during FY2013 with a total of 483 head of cattle sold for $229,629. Buyers participating in the public auctions included top buyers Montana Meats and Caswell Meats. Inala Enterprises opened a meat market center in August 2013 at Nkayi Centre, providing a marketing outlet for cattle farmers in the district. The center processes meat for retail sale and wholesales some carcasses to butcheries in Bulawayo, Kwekwe, and Gweru. Total sales for the centers first two months was $10,205.

In its effort to improve cattle genetics among smallholder livestock farmers, Zim-AIED and Inala Enterprises acquired 99 heifers for distributing on loan to farmers. Twenty-five of the heifers were paid in full through the exchange of older animals. The balance will be paid by the end of November 2013. The heifer loan scheme is already a success story: of the eight heifers bought during the first round in February 2013, five of them have already calved, and all eight heifers are currently in calf. This will translate to at least three animals for each farmer by the end of 2014.

Zim-AIED facilitated the construction of two nuclear breeding centers (NBC) at Zinyangeni and Mkalathi wards in Nkayi. Each NBC was equipped with a borehole to help the project and communities at large. The typical NBC comprises of a loading ramp, a borehole, cattle race, and cattle crush. Farmers utilize these facilities for their animals, access inputs from private agrodealers, and receive training on good animal husbandry practices.

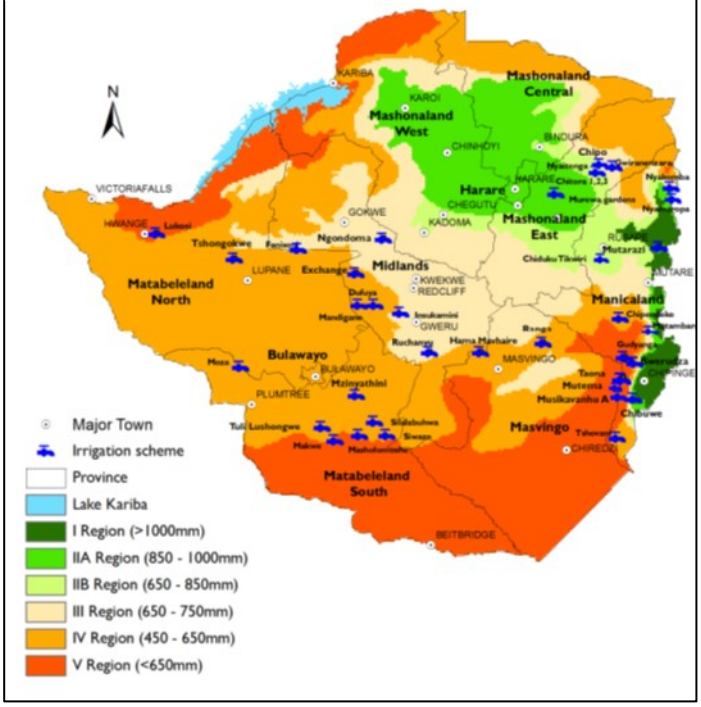
Zim-AIED established 17 fodder demonstration plots (12 in Nkayi and five in Chiweshe) to train farmers in the preparation of high-quality feed to ensure good livestock nutrition. Zim-AIED trained

farmers on how to feed their cattle using velvet bean as a concentrate at the ratios of 1:3 velvet bean to maize to achieve average weight gains of 1.2 to 1.5 kilograms per day. Farmers were further trained on storage and hay production from intercropped grasses and grains.

3.6.8 Irrigation

Widespread commercialization at levels that can benefit many smallholder farmers can only be achieved if a reliable supply of water is available. Zim-AIED views all irrigation schemes as economic-business hubs whose success and long term sustainability hinges on many aspects including engaging new technologies that ensure high yields, increased production of high value crops, reliable markets, availability of inputs through local agrodealers and having financial organizations willing to work directly with smallholder farmers and local agrodealers, having effective and efficient institutional setups to run the schemes.

Figure 18: Irrigation Schemes supported by Zim-AIED



Irrigation schemes play a critical role in achieving Zim-AIED's key program objectives: increasing rural incomes, employment, and food security of smallholder farmers especially in low rainfall regions. Gross margin results for FY2013 for sugar beans and paprika produced on irrigation schemes were more than double those from dryland areas. Sugar bean and banana sales during the year under review injected more than $2.5 million into Mutema and Chibuwe, resulting in a massive housing construction boom. Reliable access to water is a critical factor in coping with drought and climate change adaptation.

In FY2013, Zim-AIED worked with marketing companies, farmers, Agritex, and other government departments to commercialize 35 irrigation schemes through the introduction of high-value crops for both the domestic and export markets. The schemes are in six provinces and provide more than 8,000 smallholder farmers with opportunities to harvest high-yielding crops on 4,664 hectares of land (see Figure 15 and Annex 5). Five schemes Fanisoni (Nkayi District), Tshovane (Chiredzi District), Nyaitenga (Mutoko District), and Mutambara and Shinja (Chimanimani District) were added this year. Activities at Mkoba Irrigation in Midlands were scaled down due to perennial challenges of water availability caused by siltation.

The Zim-AIED irrigation team held training events focusing on the practical aspects of water management, drainage, land levelling, utility bill negotiations, establishing and running operations, and maintenance funds. The practical, hands-on trainings increased farmer participation and demonstrated ways to maximize irrigation efficiency through correct scheduling, repair of delivery systems, water saving techniques, and linkages with relevant irrigation equipment suppliers.

Notable successes as a result of the Zim-AIED interventions were:

- Farmers on 85 percent of the focus irrigation schemes managed to reduce pump down times by setting up structured maintenance funds and routine pump maintenance among themselves. The schemes mobilized resources to invested in infrastructural rehabilitation and repairs. Farmers in Manicaland mobilized more than $4,000 for the purchase of pumps, electric motors, and repairs. In Matabeleland and Midlands, farmers contributed $4,928 and $2,565 for repairs respectively.

Photo by Fintrac

A group of farmers at Bwerudza irrigation scheme in province repairing and leveling earthen channels after Zim-AIED training.

- Zim-AIED strengthened the capacity of IMCs to negotiate with ZESA and ZINWA on equal terms and facilitated workshops where all stakeholders contributed. This had significant impact on giving farmers a greater understanding of the billing mechanisms and the parastatals becoming more aware of the challenges faced by the farmers. Three schemes in Manicaland paid their long outstanding ZESA bills while 80 percent of the irrigation schemes drastically reduced both their water and energy bills during the reporting period.
- Zim-AIED assisted farmers at Gwiranenzara to get prompt assistance from ZESA to increase their power line voltage from below 270 volts to an average of 380 volts.
- Farmers at Makwe Irrigation Scheme in Gwanda (Matabeleland South) formulated an action plan to effectively utilize their scarce water resources. Availability of water was only to those who had paid their monthly payments, which enabled the farmers to meet their obligations during the reporting year.
- At Exchange Irrigation Scheme in Kwekwe district (Midlands) the IMC introduced a "card system" to enforce irrigation restrictions to defaulting farmers in a move to avoid water cuts by ZINWA due to outstanding utility bills. The IMC paid ZINWA $6,000 and bought siphons worth $1,200 for the scheme to increase application efficiency.
- Farmers at Ngondoma scheme raised $1,000 toward clearing utility bills for the month of September 2013.
- Farmers at Mutema scheme have requested Zim-AIED for further technical support on a new extension (20 hectares) of the micro-jet system which they intend to finance from their own resources.

4. CLIMATE CHANGE AND ENVIRONMENT

Access to environmental information is essential for sustainable natural resource utilization and the protection of the environment. Zim-AIED provides a platform for environmental stakeholder consultation, communication, and extension services. The program collates and disseminates environmental information as well as provides planning and monitoring tools for sustainable environmental actions at all levels of its operation. Zim-AIED undertakes these functions through environmental planning and monitoring, and environmental education among its partners and beneficiaries.

Climate change is impacting many smallholder farmers' livelihoods in Zimbabwe. Smallholder farmers are the hardest hit due to their dependency on climate-sensitive natural resources and ecosystems, such as agriculture and limited human, financial, and institutional capacity. In addition, smallholders often live in areas more susceptible to climate hazards. This section describes Zim-AIED's efforts in FY2013 to support long-term adaptation to climate change and reduce the negative impact of program activities on the environment.

Completion of the program's EMMP forms serves as a useful tool for sensitizing farmers to environmental issues and to track their level of adoption of the technical assistance given. By the end of FY2013, 287 forms had been submitted – 278 for crop-related sites, six for livestock, and three for AgriTrade.

Zim-AIED's technical delivery on good agricultural practices and good animal husbandry practices support field-level activities that have minimal negative impact on the environment and the farmer. For example, all chemicals recommended for use are PERSUAP compliant and, where applicable, integrated pest management is always given as the first recommendation for treating pests and diseases.

Natural resource management (NRM) training, centered on the safe use of pesticides and PPE application, is a core activity within Zim-AIED's promotion of environmental sensitization.

Table 16: Number of unique trainees receiving training in NRM

FY2013			Beneficiaries to date		
Male	Female	Total	Male	Female	Total
7,123	8,939	16,062	13,738	18,112	31,850

Chemicals

The introduction of PERSUAP compliant herbicides in Rusitu Valley, Manicaland provided an alternative to hand hoeing bananas. Mechanical weeding is not effective in the Rusitu environment where high and frequent rainfall makes it unmanageable. In addition, soil disturbance on lands with steep gradients exacerbates the problems of soil erosion. Use of post-emergence herbicide reduces the risk of erosion as surface soil structure is kept intact and the roots of dead weeds hold the soil together, preserving soil health. One lead banana farmer, Luckson Nyamadzawo, a farmer in Ward 23, Mutsvangwa, adopted herbicides use throughout his four hectare plantation.

The introduction of an insecticidal dressing for sugar bean seed in Mutema and Chibuwe reduced the need to use traditional non-PERSUAP compliant chemicals in the control of bean stem maggot. Over 400 hectares of sugar beans were planted with Apron Star seed dressing, resulting in reduced use of diazinon and other toxic chemicals traditionally used to control the bean stem maggot, thus reducing harm to the environment and the farmers as well as increasing sugar bean yields.

In the Honde Valley, through training, awareness discussions and technical assistance on the safe use of chemicals, farmers stopped using non-PERSUAP compliant herbicides and began implementing key recommendations such as using glyphosate for weed control. There has been a marked decrease in the use of high toxicity phosphine tablets to control mole rats as farmers implemented physical control methods promoted by the program. Besides suppressing weeds and reducing evaporation, farmers have realized the value of mulching to promote rainwater infiltration, reduce runoff, and minimize soil erosion. Farmers also realized that higher plant densities suppress weed growth due to continuous shading and increase overall yield. Most old plantations are now being filled, reducing the need for herbicide control, thereby avoiding an unnecessary chemical burden on the environment.

Zim-AIED trained 100 farmers in Murewa and Mutoko on safe and effective use of pesticides. The training covered general safety, proper storage, transportation, use and safe disposal of agrochemicals and containers.

Twenty training sessions on improving efficiency of nutrient use (fertilizer, manure, composts) were held in FY2013. This included advocating for farmers to have their soils tested and analyzed. Farmers were encouraged to make permanent raised beds on plots with designated drainage pathways.

Livestock

During routine dipping sessions, the program taught 17 farmers at Zinyangeni NBC-2 and 19 at NBC-1 on the triple rinsing and crushing method for the safe disposal of empty dipping containers and other chemicals used for animal health. Zim-AIED also trained farmers on the importance of using PPE when dipping their livestock, and to reinforce that, field day prizes included PPE material. Farmers at the NBCs now use this PPE when dipping or carrying out other livestock management practices and Zim-AIED advised its partner to procure additional PPEs for use at the three NBCs.

During the construction of the meat market center, Zim-AIED partner Inala Enterprises worked with the Department of Environmental Health under the Ministry of Health and Child Care to ensure compliance with environmental health practices and regulations.

A total of 532 smallholder livestock farmers in Chiweshe in Mashonaland Central received training on rangeland management. The focus was on rotational grazing, veldt fire control and monitoring, setting up fire guards, and community responsibility in veldt fire controls.

Water

In Zimbabwe, as elsewhere, sustainable development begins with water. Rain can make the difference between good crops and food security, or drought and famine. Water shortages can cause conflict – between individuals, communities, and countries. The irony is that water is also nurturing, linking communities and fostering kinship and trade relations. The biodiversity of Zimbabwe depends on water. The national economy depends on it. Water flows through every economic sector in the country: agriculture, energy, industry, mining, tourism, and fisheries.

The demands on water resources in Zimbabwe are growing daily, limiting the country's ability to provide its people with clean drinking or reliable irrigation water. As the population grows, more food must be produced, more houses and infrastructure built, and more industry is needed. All these activities need water. Poverty is also a significant factor in environmental degradation as it forces people to over-exploit their environment in order to survive. This can lead to depletion of resources and to pollution, worsening the status of the disadvantaged.

Photo by Fintrac
Improved earthen drainage channel at Moza irrigation scheme

To mitigate these challenges, Zim-AIED has worked to promote the efficient use of water for irrigation. Marked improvements have been seen on most flood irrigation schemes after farmers were trained on the three quarter rule technique. This involves removing siphons when water has reached three quarters of the way down the furrow or basin. This reduces leaching, unnecessary wastage of water and costs associated with irrigation, as well as minimizing the possibility of groundwater contamination with nitrates.

Farmers at Bwerudza Irrigation Scheme in Chipinge, which has earthen canals, received technical assistance in repair and leveling of their channels to improve water flow and reduce losses due to deep percolation.

Land leveling maximizes water utilization in this type of irrigation system by preventing ponding and leaching of nutrients. Sustainable land use practices are essential to long-term profitability and agricultural development. Farmers continued to receive training on water management skills, soil conservation through mulching and appropriate use of fertilizers. Insukamini Irrigation Scheme farmers in the Midlands province heeded environmental concerns by bringing in soil from surrounding anthills in an effort to replace eroded top soil.

Moza Irrigation Scheme in Bulimia district (Matabeleland South) has salinity problems exacerbated by poor maintenance of drainage channels, which had been silted and blocked over the years. Farmers opened up the drainage channels and prohibited the dumping of crop residues along them, which also reduced flow.

Land and related sensitive systems

Zim-AIED is working on 35 irrigation schemes as an integral part of the program's agribusiness hub approach. The first priority schemes are gravity-operated and have low maintenance costs. However these schemes present environmental challenges related to soil erosion and salinity.

Farmers in all irrigation schemes were encouraged to lay down crop residues as mulch to prevent excess evaporation and reduce erosion, particularly in the dry season when water is scarce. Manicaland schemes also benefitted from natural resource management technical assistance on canal embankment repairs and the use of plastic or crop stover as a ground buffer for water discharge from siphons. Farmers at Musikavanhu bought 100 meters of siphon poly pipe to reduce erosion of canal embankments and minimize over-application of water on their scheme.

The program is also promoting tomato-trellising methods using poles interspersed with wire, rather than an individual pole for each plant, which minimizes tree cutting for this purpose. On most banana plantations, Zim-AIED is promoting the use of polypropylene as props instead of the traditional poles.

5. GENDER

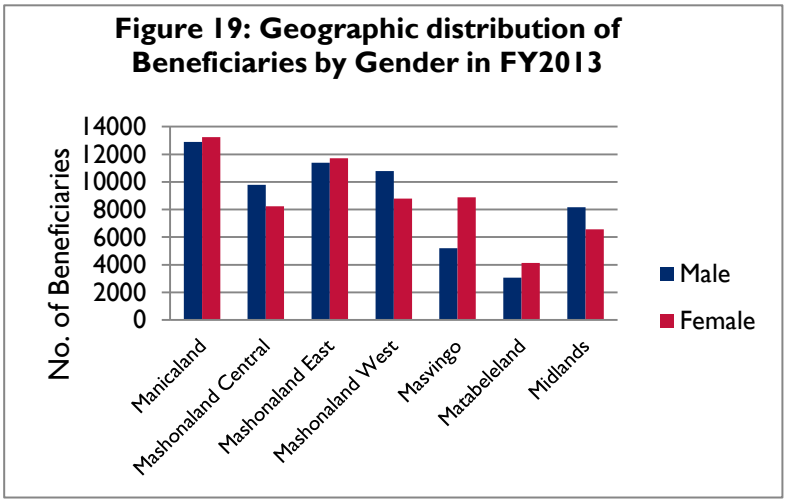
GNDR 1: *Number of lead farmers in assisted programs*
GNDR 2: *Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources.*
GNDR 3: *Number of project participants in relevant leadership positions*
GNDR 4: *Proportion of target populations reporting increased agreement with the concept that males and females should have access to social, economic, and political opportunities.*
GNDR 5: *Number of farmers engaged in contract farming*

To enable women in agriculture to reach their full potential, Zim-AIED promotes female participation in leadership, fosters gender dialogue that increases women's access to finance and credit, and encourages female farmers to adopt labor-saving new agricultural technologies that increase productivity.

Measuring Zim-AIED's Gender Impact and Women's Empowerment

During the reporting period, Zim-AIED's commitment to gender integration assisted thousands of women throughout Zimbabwe in improving the quality of their lives and families through increased production and productivity, improved microenterprise development, and expanded access to markets (Figure 19).

Figure 19: Geographic distribution of Beneficiaries by Gender in FY2013



During FY2013, Zim-AIED assisted 50,313 farmers across the country to access productive economic resources, of which 48 percent (23,954) were women. Ongoing staff training and gender awareness sensitization has maintained the percentage of women registered in Zim-AIED trainings at 50 percent over the life of the program.

Forty-eight percent (35,913) of the 75,178 Zim-AIED beneficiaries that applied new technologies in FY2013 (such as new crop genetics, improved pest and disease management, correct fertilization and water management) were women.

A Women in Agriculture Workshop, organized in conjunction with Zim-ACP, was held during the third quarter of FY2013. Highlights of the workshop and resulting activities include:

- The attendance of three participants (two women) from the Moza irrigation in Bulilima district helped to influence the scheme's recent IMC election results. After years of delays, the elections resulted in five women being elected to the seven-member committee including a woman chairperson.
- Deliberate gender mainstreaming efforts by Zim-AIED led to women in Matabeleland North and South hosting 70 percent of the Zim-AIED demonstration plots that to showcase good agricultural practices.
- Dates and times for specific training events are scheduled to cater to women's routines to not conflict with other activities such as household chores, child clinic days, and church

events. The increased attendance to training sessions has given these hard-working farmers more confidence to enter local and district competitions. Some women, like Joyce Mthunzi of Silalabuhwa, were recognized for excelling in production. Joyce won the top prize with her butternut crop at both the scheme and district level. Sibongile Msebele of Moza scooped two top awards in a farmer competition held at Moza Irrigation scheme.

Photo by Fintrac
Strategic planning meeting with Madigane farmers in Gweru district of Midlands with an equal gender representation.

- Female farmers in Honde Valley continue to lobby for greater levels of influence which has resulted in all farmer groups that are working with Zim-AIED to revise their constitutions to include a recommendation that women and youth be given equal opportunity for group leadership positions. This is a major breakthrough in an area that is predominantly male dominated.
- Also in Honde Valley, Zim-AIED's partner FAVCO originally contracted only 29 percent women for banana production; by May this had increased to 46 percent.
- Ten women in Nyanga set up their own women's group, Riverside, as a result of the encouragement received during the Women in Agriculture workshop. The women formed their own savings club and have kept good records of their transactions over the last four months. Members were later prioritized to receive loans from Virl Microfinance as their high standard of excellence automatically put them in the spotlight as credit-worthy.

Leadership

Zim-AIED promotes programs that help women effectively participate in marketing and gain ownership and management of small and medium-sized enterprises and producer and trade associations. Enhancing the capacity of women to participate in and lead key organizations not only ensures that rural women are represented and have a voice in key decisions, but also results in more widely-shared benefits.

Of the 539 farmers registered as lead farmers in FY2013, 40 percent are women. The impact of women in leadership combined with support through gender training is critical in spearheading Zim-AIED's gender initiatives in the rural areas. Although the percentage of women in leadership positions remained static during the last two quarters of FY2013, Zim-AIED aims to increase this by five percent (to 45 percent) in FY2014.

During FY2013, the total number of project participants in relevant leadership positions was 455, with 35 percent of these being women. This has been established as the baseline figure for gender indicator GNDR 3. The Zim-AIED target for FY2014 will be 40 percent.

The number of women involved in new contract farming during FY2013 is 2,989 (48 percent). This is an excellent achievement although ongoing gender sensitization and awareness is still required as input loans are typically linked to contract farming and, as a result, men believe they should be the ones registered in order to control the assets.

Access to finance and credit

Loans to female borrowers constituted 31 percent of the total AgriTrade portfolio in the FY2013 while the percentage by value of loans accounted for 13 percent. The percentage composition for both the number and value of loans also showed the same contribution for the cumulative figures since program inception. Although these figures are far lower than Zim-AIED would like, they are still a positive achievement given Zimbabwe's current social, cultural and economic climate.

Table 17: Loans Disbursed by Gender FY2013	Men	Women	FY2013
Number of loans	429	192	621
% of loans	69%	31%	100%
Value of loans	$5,238,579	$784,914	$6,023,493
% of loan value	87%	13%	100%

Table 18: Cumulative Disbursements by Gender	Men	Women	Cumulative
Number of loans	1,033	466	**1,499**
Number of loans	69%	31%	100%
Value of loans	$12,117,819	$1,821,076	**$13,938,895**
Value of loans	86.9%	13.1%	100%

The Zim-AIED team is continuing to engage partner banks on different strategies to grow both the number and value of women's loans secured under the AgriTrade portfolio. Some of those implemented in FY2013 include:

Group lending to smallholder farmers on irrigation schemes

In the first and second quarters of the FY2013, 14 out of 35 (40 percent) loans went to female smallholders from Mutoko in Mashonaland East. Each farmer received $500 for the purchase of inputs to establish 0.125 hectares of cherry peppers. The farmers also received seedlings and a purchase guarantee from Selby Enterprises. These were the first AgriTrade loans made directly to smallholder farmers for crop production.

In the fourth quarter of FY2103, 20 of 44 loans went to women from Musikavanhu Irrigation Scheme in Manicaland. Worth a combined $30,700, the loans ranged between $300 to $750 for the purchase of inputs to establish various crops (tomatoes, green mealies, paprika, onion, potatoes) on plots varying in size from 0.1 to 0.8 hectares.

Also in the fourth quarter of the FY2013, Zim-AIED identified Untu Capital, an independent microfinance institution which disbursed $3,300 to 11 smallholder farmers at Insukamini irrigation scheme in Gweru, Midlands. Seven of the 11 loans were to women growing green mealies, cabbage, and butternut on plots varying in size from 0.1 to 0.4 hectares.

Although the above interventions have been successful, the initiative with the Women Development Savings and Credit Union (WDSCU) at Moza irrigation scheme in Matabeleland South has failed to take off. WDSCU has been unable to source external funding and, to date, have not opened their village bank in the area. However, they have assured their 48 members at Moza that they will open before the end of the year.

AgriTrade Promotion at the Women in Agriculture Workshop

Workshop participants contributed to finding credit solutions for women involved in agricultural businesses. The following suggestions are the outcome of this engagement:

- Women should form small well-managed groups to enable them to access group guarantees.
- Women need to be educated on financial credit through workshops and field days.

- Banks should accept alternative forms of collateral such as performance track records that indicate credit worthiness as many women do not own cattle.
- Increase awareness of available loans through press advertisements and deliberate targeting of women. Use of local languages in information dissemination, so that the right message gets to the right people.
- Increased efficiency on loan disbursement by banks to minimize number of follow-up trips made by women to the banks.

AgriTrade Media Campaign

The Sunday Mail, the country's most widely-read weekend newspaper, published a full page AgriTrade news article highlighting partner banks' drive to promote female borrowers as well as the 36 month CAPEX loans available for repeat borrowers. The story written in consultation with Zim-AIED highlighted women who had successfully accessed AgriTrade working capital loans as well as repeat borrowers who accessed capital investment loans during FY2013. Although there were no statistics to confirm the impact of the article on women's access to AgriTrade information, the three AgriTrade partner banks confirmed an increase in the traffic of applications as well as enquiries on the fund during the same month.

The initiatives highlighted in this section represent the beginning of innovative programs on gender. To bring about robust agricultural growth, Zim-AIED is committed to working with the government of Zimbabwe to significantly improve the ability of women to reach their full agricultural productive capacity. This will require a systematic, collaborative effort to build on impact evaluations, best practices, and lessons learned, and to better integrate women into the agricultural value chain.

6. LESSONS LEARNED

The main lessons learned during program implementation to date and mitigation steps taken during this quarter are listed below. Strategic challenges are provided separately in Section 7.

Separate, written, and signed protocols with provincial and district authorities are essential to implement Zim-AIED activities on the ground, even though a memorandum of understanding has been agreed with MAMID. Many meetings were held with the authorities in each district and additional documentation provided where necessary.

Equally important as obtaining local authority approvals is to provide regular reports, newsletters, and other information to local administrators.

Field activities can be implemented more effectively if AGRITEX officers are involved from the start. However, activities cannot be delegated to AGRITEX officers without close supervision and training. Zim-AIED engaged AGRITEX in all field interventions without providing financial incentives.

As a general rule, conditions in Zimbabwe do not allow for successful commercial production of horticultural crops outside of irrigation schemes. Selected schemes were provided with intensive technical support to create whole-scheme business plans and step up production of higher value crops and act as hubs for surrounding rain-fed farmers including both crops and livestock.

Irrigation schemes provide a potential competitive advantage for thousands of smallholders, but they are misunderstood. No attempt to rehabilitate schemes or improve management can be successful until growers on schemes agree to and start implementing marketing and business plans that treat the scheme as a single commercial unit. Zim-AIED continues to promote this approach with selected schemes.

Many pumped irrigation schemes have outstanding electricity bills of up to $300,000. In an attempt to recover this, ZESA turns off the electricity supply to make growers pay whenever it sees money coming into the scheme, either from sales of produce or investment by development projects such

as Zim-AIED. Until this problem is resolved, Zim-AIED is working mainly with schemes that have manageable fuel bills and low arrears, which are usually those that are gravity fed.

Food crops, especially maize, sugar bean, and groundnuts must be included in cropping systems recommended for commercialization of communal farmers and other types of smallholders, including irrigation schemes. These farmers are not ready to implement high-risk cash cropping systems without the inclusion of food crops. Zim-AIED promoted inclusion of the most suitable food crops for each climatic zone, in combination with cash crops, to achieve low risk commercialization.

Growth of commercial farming on communal land will not succeed using traditional labor-intensive systems. Labor is in short supply and often cost-prohibitive. Training in use of herbicides, mechanization, and improved irrigation systems is essential to improve productivity.

Most farmers did not have experience with crop budgets or pricing strategies. Business training on budgeting enabled farmers to appreciate the profitability of cash crop production.

High yields of maize are achievable by smallholders. With early planting and optimum use of inputs, yields obtained by contracted farmers around the established agribusiness hubs were at least double their neighbors. If high potential areas are targeted, smallholders employing good agricultural practices and enough working capital to invest in inputs (fertilizer, chemicals, seed, and labor) can easily achieve yields of 4 tons per hectare. Commercializing crop production among smallholder farmers entails farmers accessing adequate inputs to establish enterprises that meet both their food and cash requirements in addition to supporting them with training and technical assistance.

An industry approach is required to minimize side marketing in paprika. In food crops, side marketing is still a major problem for food crops where there are many opportunistic buyers in production areas during the harvest period. As a result, contract growing of these crops is high risk.

Contract farming is not always the best option for smallholder growers. It is necessary for non-food crops such as Tabasco chili for which there are few "open market" buyers but difficult for growers and buyers to comply with for major food crops where there are many cash buyers.

Emphasis should be on making inputs available to all farmers and training farmers in the cost-benefit of buying good seed, fertilizer, herbicide, and agrochemicals. Production credit lent directly to farmers to fund purchase of inputs also needs to be increased with or without contracting.

Recoverable grants for viable but un-bankable projects can have a good developmental impact but recovery rates are low. The low rate of recovery needs to be budgeted from the outset if this mechanism is used in future.

Empowering farmers to communicate with stakeholders through documented communication ensures their challenges are heard and quickly solved. Facilitating combined trainings with stakeholders such as DoI, Agritex, ZESA, and ZINWA leads to win-win arrangements for the farmers and the stakeholders themselves.

7. CHALLENGES

The main strategic challenges facing the development of agribusiness sector and commercialization of small-scale farmers are outlined below:

Despite Zim-AIED interventions, low productivity remains a national problem as inputs remained inaccessible to the majority of smallholders. Many smallholders are also farming on soils with sub-optimal pH (high acidity) and low fertility, which take several years to rehabilitate. Much of the potentially productive land, where high yields can be achieved, is held by A1 and A2 farmers not accessible to the program.

Sustainable agricultural development needs rural investment in a range of agribusiness activities covering production, processing, logistics, and marketing. Although Zim-AIED is contributing actively to short-term credit availability, long-term investment funds are almost non-existent and traditional private sector investors are still reluctant to invest outside of Harare. This applies particularly to processing of fruits and vegetables that was previously an important part of the agriculture sector. New rural entrepreneurs are emerging and receiving support from Zim-AIED but their progress is slow in the absence of investment funds.

Irrigation schemes are a good example of the above point. They represent a potential opportunity for smallholders to become successful commercial farmers but require a massive amount of new capital investment for rehabilitation and upgrading. Donors and government are making piecemeal interventions that inevitably fail when the support ends, instead of developing and financing a national strategy for commercialization of the irrigation sub-sector. Zim-AIED has been working with a World Bank team considering investment in water, including irrigation, but this could take several years to be approved.

Donor and government subsidies for seed and fertilizer have not increased productivity or production over the past five to 10 years and may even have had a negative impact. The expectation of free inputs is preventing many smallholders from raising their productivity and profitability.

Poor and unregulated seed quality continues to be a challenge with specific examples this season being the low germination of groundnut seed and weevil-damaged maize seed.

Importation of vegetables from South Africa continues to be a major challenge especially for smallholder farmers who are looking to diversify into high-value crops. For logistical and cost reasons, the large wholesalers are reluctant to replace these imports in order to procure local production.

Agritex officers at the lower level impose a high level of dictatorial policies based on their concept of food security which means farmers need to plant cereal crops. This mind set is difficult to break as it is promoted at district and provincial levels.

8. CONCLUSIONS

After 36 months of implementation, Zim-AIED is on course to meet its main objectives. A summary of performance against PMP indicators is shown in Annex 2 and results against the 13 Feed the Future indicators employed to track Zim-AIED are described below. Targets were exceeded for nine of the 13 indicators being tracked. The biggest variances were for incremental sales and for number of farmers adopting new technologies. Although the results were good for these indicators relative to the baseline, in retrospect, the targets were unrealistically high.

- **FTF MIS 4.5.2-13** The FY2013 target was for 34,000 rural households benefiting. The result was 49,992 households, 47 percent over target. Demand for technical assistance toward commercialization was greater than anticipated. Quality of service delivery was also high.

- **FTF MIS 4.5.2-23** The FY2013 target was for incremental sales of $40.65 million. The result was $36.33 million, 10.6 percent below target.

- **FTF MIS 4.5-16** The FY2013 target was for gross margins of $250, $1,500, and $1,000 per hectare for maize, paprika, and banana respectively. The results were $213, $767, and $1,834 per hectare for maize, paprika, and banana respectively. Dryland maize and paprika were under target due to low inputs applied and unfavorable weather conditions. For banana, the target was 83 percent above target.

- **FTF MIS 4.5.2-11** The FY2013 target for the number of enterprises and organizations receiving assistance was 770. The result was 942 enterprises, 22 percent above target due to the high demand from rural agribusinesses for business training and improved access to loans by enterprises and organizations.

- **FTF MIS 4.5.2-38** The FY2013 target for the value of new private sector investment in agriculture was $2 million. The result was $1.36 million, 32 percent below target due to political risk which discouraged investment.

- **FTF MIS 4.5.2-43** The FY2013 target for the number of firms operating more profitably due to program assistance was 20. The result was 14 firms, 30 percent below target, mainly due to the macroeconomic environment that constrained liquidity issues. These affected consumer demand and cost of doing business.

- **FTF MIS 4.5-2** The FY2013 target for number of jobs created was 2,159. The result was 1,224 full-time job equivalents, 43 percent below target. The number of casual and temporary jobs created was in excess of the target. In the present economic climate in Zimbabwe, both farmers and companies are avoiding taking on new permanent staff.

- **FTF MIS 4.5.2-2** The FY2013 target for number of hectares under improved technologies was 37,006. The result was 50,757 hectares, 37 percent above target due to clearer definitions from the FTF handbook as well as intensified training and visual learning around the agribusiness hubs encouraging rapid uptake of GAPs by smallholders.

- **FTF MIS 4.5.2-5** The FY2013 target for the number of farmers applying new technologies was 57,376. The result was 75,178 farmers, 31 percent above target due to clearer definitions from the FTF handbook as well as intensified training and visual learning around the agribusiness hubs encouraging rapid uptake of GAPs by smallholders.

- **FTF MIS 4.5.2-7** The FY2013 target for the number of farmers receiving short-term agricultural productivity training was 60,000. The result was 54,851 farmers, 8.5 percent below target.

- **FTF MIS 4.5.2-42** The FY2013 target for the number of enterprises and organizations receiving assistance was 770. The result was 942 enterprises, 22 percent above target due to the high demand from rural agribusinesses for business training.

- **FTF MIS 4.5.2-29** The FTF2013 target for value of agricultural and rural loans disbursed was $6 million. The result was $6.02 million.

- **FTF MIS 4.5.2-37** The FY2013 target was for 34,150 MSMEs to receive training. The result was 50,313 MSMEs, 47 percent above target due to the greater than anticipated demand for technical assistance toward commercialization.

ANNEX 1: SNAPSHOTS

Horticulture Tripling Farmers' Incomes in Matabeleland

Good water management is essential to ensure reliable water supply in arid regions.

Photo by Fintrac

Smallholder farmers are now able to produce high-quality crops thanks to the adoption of good agricultural practices taught by Zim-AIED.

"The farm products are improving farmers' incomes, standards of living, as well as employment opportunities."

Sibongile Ndlovu, smallholder farmer

Access to new methods of farming to produce high-value crops are enabling smallholder farmers in the semi-arid province of Matabeleland North to triple their incomes.

With skills gained through training and technical assistance led by the Zimbabwe Agricultural Income and Employment Development program (Zim-AIED), 61 farmers have diversified into the production of cabbages, tomatoes, potatoes, onions, and green mealies to meet a growing demand for fresh produce, which is usually scarce in the area.

"The farm products are improving farmers' incomes, standards of living, and creating employment opportunities," said Sibongile Ndlovu, of Tschongokwe Irrigation Scheme in Lupane district.

This 24-hectare scheme is in one of the driest and hottest areas of the country. Rain-fed agriculture is therefore not a viable option and the region often suffers food and nutritional crises.

Zim-AIED began working with the farmer group to address these issues, focusing on efficient water management and good agricultural practices. They learned to apply mulching to keep the soil saturated during extreme heat and to follow the "three quarter" rule, which dictates farmers remove siphons after irrigating three quarters of the field and allow the water to seep through the whole field without overspilling.

Other best practices include calendarized planting, proper fertilizer and herbicide use, and integrated pest management. The program also offered input loans to purchase seeds and other inputs.

In April, Zim-AIED established five 0.05-hectare demonstration plots of cabbage at Tschongokwe. Each plot is yielding an average of 1,500 heads at $0.50 per head. Local shop owners previously trucked their cabbage in from distant Bulawayo, so Tschongokwe provides them a convenient market. After deducting input and logistics costs, each demo plot holder is pocketing $583 from their first harvest's sales. The farmers used to earn around $200 per season from their wheat crops.

Widespread commercialization of horticultural produce is only possible if a reliable supply of water is available. Zim-AIED is working to improve and raise awareness of good water management and maintenance on irrigation schemes to revive productivity. The program is working on 35 irrigation schemes, covering more than 4,600 hectares and reaching 8,000 smallholder farmers.

Meat Market Boosts Smallholder Farmers' Incomes

Smallholder livestock producers can fully commercialize their activities through implementation of good animal husbandry practices and access to reliable markets.

Photo by Fintrac

The launch of a state of the art meat market center at the heart of rural Nkayi in Matabeleland North province is instrumental in commercializing local smallholder livestock activities.

"We had been facing challenges of selling our livestock at giveaway prices. Now, we are benefiting from slaughter services as the center charges reasonable costs. "

Mehluli Mpofu, smallholder livestock producer

In a semi-arid rural district in Zimbabwe's Matabeleland North province, an innovative livestock production and marketing project is improving the food security and incomes of smallholder livestock farmers who have long struggled with insecure markets and erratic prices.

USAID's Zimbabwe Agricultural Incomes and Employment Development program (Zim-AIED) is working with both farmers and buyers to improve the quality of the livestock and the stability of meat markets and improve the efficiency of the livestock value chain.

Livestock farmers receive technical assistance in good animal husbandry and feeding practices to improve the quality and health of their breeds. Zim-AIED also links them to buyers such as Inala Enterprises.

Zim-AIED began working with Inala in 2012 to initiate a cattle lending scheme and open centrally-located management hubs and meat markets. Under the scheme, program-supported farmers have access to high-quality cattle for breeding purposes.

The new meat market in Nkayi opened in August, and is the first of its kind in the district. The center features both a state-of-the-art cold room and high-end digital scales that allows the butchers to ensure accuracy and sanitation. It can store up to six carcasses of beef at any one time.

Inala buys directly from livestock farmers at average prices of $1.80 per kilogram compared to $1.10 per kilogram by other rural buyers. The butchered meat is then sold to customers flocking to the new market. They are selling around three carcasses a week, triple what other markets in the area report. After only two months, the center has grossed more than $10,300 in sales.

Inala owner and managing director, Ananias Ncube, said Zim-AIED's intervention is revolutionizing the rural livestock industry. "In the past, each farmer was producing small herds with poor genetics as a result of poor animal husbandry practices," said Ncube.

The center also offers butchery services to farmers participating in the program, which had previously been expensive and difficult to access. "We had been facing challenges of selling our cattle at give-away prices. Now, we are also benefitting from slaughter services as the center charges reasonable costs," said local farmer Mehluli Mpofu.

Zim-AIED and Inala are benefitting 1,000 farmers in the district, and the project plans to expand to reach other farmers in new districts over the coming months.

Banana Farming Transforms Smallholder Farmers

240 smallholder farmers in Mutema have sold more than $500,000 worth of high-quality bananas.

Photo by Fintrac

Lindiwe Sithole stands in front of the new home she built with the money she earned from her banana crop. She expects to earn $5,000 from bananas alone this year.

"My income level has increased significantly as a result of using new technologies, training and access to markets."

Lindiwe Sithole, smallholder farmer

Lindiwe Sithole, a 23-year old orphaned smallholder farmer in Mutema village in southern Manicaland, had been living off minimal profits from her small plots of tomatoes, wheat, and maize for years. The traditional agricultural methods she'd been following resulted in low harvest and little income.

Further jeopardizing her situation is Mutema's dry climate, which receives less than 500 millimeters of rain per season and makes meaningful crop production nearly impossible without irrigation.

To address these challenges, USAID began working with Matanuska, a commercial banana company, in 2011 to develop 60 new hectares of banana production for small-scale farmers in Mutema through the Zimbabwe Agricultural Income and Employment Development (Zim-AIED), program. The five-year, $36 million program helps farmers like Sithole to treat their farms as businesses.

The program is working with 240 plot holders, including Sithole, all of whom are reaping benefits from implementing good agricultural practices and modern production technologies. Mutema farmers received tissue-cultured banana seedlings, which they kept in an on-site nursery until the plantlets were ready for transplant. With support from Zim-AIED, the farmers also installed a micro-jet irrigation system to optimize water use efficiency.

Sithole's 0.25-hectare banana plot has transformed her life. She started planting bananas in February 2012. To date, she has harvested 14 tons worth $3,565. Sithole has already repaid $2,317 toward her input loan. With the increased income, she built a modest house, paid for her family's education, and purchased more nutritious food.

She will harvest her second cycle in the coming weeks and said she expects $5,000 in sales revenue for the year, 25 times what she used to earn from her staple crops. At yield levels of roughly 56 tons per hectare, the smallholders at Mutema can now compete with commercial producers.

"My income level has increased significantly as a result of using these new technologies, trainings, and access to markets," Sithole said.

The Mutema farmers have so far sold 1,600 tons of bananas worth more than $500,000.

Profitable Chilies Boost Farmers' Incomes

New cash crops with sustainable markets spur smallholder farmers to diversify from traditional low-yielding staple crop production.

Photo by Fintrac Inc.

Beneficiary farmer Martin Mahanyela and his wife during the peak picking period; a time they created employment for more than five people a day.

"I am very excited to have been given the opportunity to venture into ABE chili production as it is a high income earning crop."

Esther Fatachi, smallholder farmer

A key component to increasing smallholder farmer incomes is the introduction of high-value crops to replace low-yielding staple crops, particularly in dry regions where the climate is not conducive to horticulture.

The Zimbabwe Agricultural Income and Employment Development program (Zim-AIED), in partnership with Better Agriculture, is working with farmers at Tshovani irrigation scheme in Chiredzi, Masvingo to produce African Birds' Eye (ABE) chilies.

Farmers at the scheme traditionally grew cotton, maize, and wheat, which produced low yields. These crops were mainly for home consumption, with each farmer earning less than $200 per year.

Through Better Agriculture, Zim-AIED piloted ABE chili production with 16 farmers at Tshovani last season. Better Agriculture offered input loans that included seedlings and fertilizers sufficient for a 0.5-hectare plot. The farmers received training from Zim-AIED technicians in good agricultural practices such as transplanting, proper timing of fertilizer application, and disease and pest control.

By following these practices, farmers achieved yields of up 12 tons per hectare. Esther Garwe, one of the 16 pilot farmers, sold $4,150 worth of high-quality chilies from her 0.4 hectare plot.

Another farmer, Esther Fatachi attributed her productive harvest (12 tons per hectare) to the good agricultural practices she learned from Zim-AIED. Fatachi earned more than $5,000 after selling her produce at $0.83 per kilogram. Using proceeds from the sale, she purchased a residential stand at a nearby business center, a water pump, and paid school fees for her grandchild.

Before venturing into ABE chili production, Fatachi and her fellow smallholder farmers were heavily in debt and struggled to pay their electricity and water bills, let alone invest in plans for the future.

"I am excited to have the opportunity to venture into chili production as it is a high earning crop. I urge other farmers to join this project so that they will afford to pay for their utility bills," Fatachi said.

In addition to increasing farmer incomes, the pilot project is stimulating wider growth as the chili farmers hire other local residents to help in the fields during harvest.

Altogether, farmers at Tshovani harvested 58.3 tons of ABE chilies and realized sales of $48,455 earning a gross margin of $5,256 per hectare.

Better Agriculture pays $0.83 per kilogram for fresh chilies and dries them in their facilities before selling them to South African fast food chain, Nando's.

With Access to Credit, Livestock Business Thrives

Zim-AIED supports rural farmers to move from subsistence to commercial farmers.

Photo by Fintrac Inc.

Thomas Takawira, second time AgriTrade borrower, now employs three workers at his growing livestock operation in Gokwe.

"I have become one of the leading broiler producers in my community, thanks to the AgriTrade loans."

Thomas Takawira, agribusiness owner

When Thomas Takawira started a small livestock operation in the Zhombe area of Midlands Province in 2009, he planned to take advantage of the large market for poultry in neighboring Gokwe South. But without access to capital, he could not afford adequate stockfeed and his business faced operational challenges.

Relief for Takawira's project came in the form of USAID's Zimbabwe Agricultural Income and Employment Development program's (Zim-AIED) AgriTrade credit facility. AgriTrade provides working capital and capital expenditure loans to agribusinesses and to smallholder farmers to stimulate investment in the agricultural sector.

Takawira accessed his first loan for $1,000 in December 2012 to manage the production of 100 birds. With this influx of cash, he could buy quality chicken feed at wholesale prices from a national distributor in the district.

"The trick with broiler production is to have enough feed and because of AgriTrade, I am now able to purchase feed in bulk," Takawira said.

By the time he received a second loan for $1,500 in May 2013, Takawira had built a second fowl run with a capacity of 100 birds, bringing his total capacity to 200 birds. With the higher production, he has more than doubled his monthly income.

With these profits, Takawira has invested in a solar panel, a generator, and a water pump to provide reliable power to his business, as well as irrigate his vegetable production. Takawira has also hired three full-time employees to help him care for the livestock.

Takawira now regularly supplies his chicken and pork products to schools, canteens, and a police camp in Kwekwe and Gokwe districts, and at times to clients in neighboring Mashonaland West.

The project, which started as a source of basic income for Takawira and his wife, is now a thriving business with proceeds used for home improvements and further business expansion. Takawira plans to increase his production to 200 birds every two weeks to meet rising demand.

AgriTrade is part of USAID's Zim-AIED program, which, in combination with other production and business development projects, is stimulating activity in smallholder agriculture, and subsequently contributing to economic growth in Zimbabwe.

Produce Trader Drives Agricultural Activity

Zim-AIED is improving access to markets and increasing incomes for smallholder farmers in Zimbabwe.

Photo by Fintrac Inc.

AgriTrade-supported Manica Produce processes up to 60 tons of fruit and vegetables sourced from smallholder farmers in eastern Zimbabwe every month.

"By helping us do our business better, the program is also providing a ready market for small-scale farmers."

John Sharpels, agribusiness owner

Manica Produce Market, owned by the Sharpels family, is one of the largest fruit and vegetable traders in Manicaland province. After receiving two short-term loans from AgriTrade, the company is set to continue its 36-year legacy in the region.

The Mutare-based wholesaler received a working capital loan for $50,000 in December 2011 to increase its purchase ability. Manica Produce mainly buys potatoes, tomatoes, and cabbages from rural smallholder farmers, which they then grade and package for resale to retailers, hospitals, and colleges across Manicaland.

AgriTrade is a revolving credit facility managed by the USAID-funded Zimbabwe Agricultural Income and Employment Development (Zim-AIED) program. The facility offers lines of credit to agribusinesses to purchase crops and livestock from smallholder farmers across Zimbabwe.

"AgriTrade's preferential lending rates of 11 percent have made all the difference to our business," says John Sharpels, one of the company's directors. Manica had previously been borrowing at unsustainable rates of 16 to 25 percent.

After a decade long economic downturn, Manica, like many businesses, had started facing liquidity challenges. The AgriTrade loans enabled the company to pay its suppliers on time and secure produce from communal farmers in larger volumes.

"Unlike others who buy on credit, Manica gives me cash-on-delivery for my lettuce. This means I can settle my transport costs and return to my farm right away without worrying about any extra costs," says Clifford Marira, a smallholder farmer from Mutasa. Cash payments also enable Manica's smallholder suppliers to buy farming inputs from local agrodealers.

Manica Produce recently purchased two refrigerated trucks to extend their delivery capabilities into other neighboring provinces. The company has also invested in new equipment such as scales and refrigerators to help improve efficiency to keep up with competing traders.

Since accessing the loans, Manica Produce has seen sales grow by 11 percent to reach a monthly average of $109,000. They are buying approximately 60 tons of fresh produce from smallholders each month. A second loan for $50,000, accessed in January 2013, is helping Manica further increase its purchases from smallholder farmers. They also plan to expand their full-time staff of 39 to better service the new inventory.

By supporting agribusinesses throughout the agricultural value chain, Zim-AIED works to increase the incomes and employment opportunities for smallholder farmers in Zimbabwe.

ANNEX 2: PERFORMANCE INDICATOR SUMMARY TABLE

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
1	# of rural households benefiting from USG assistance	FTF 4.5.2-13	HH	0	72,831	34,000	49,992
2	Net income per household from target agricultural products	Custom (AIED 1)	US$	483	835	1,200	1,062[1]
3	Value of incremental sales attributed to FTF implementation	FTF 4.5.2-23	**Total sales(US$ million)**	**3.90**	**16.53**	**36.48**	**51.20**
			Actual sales – Banana (US$)	28,249	3,815, 000	6,000,000	5,526,757
			Actual sales – Paprika (US$)	1,130,267	4,488,000	5,000,000	910,855
			Actual sales – Maize (US$)	2,742,980	8,230,000	13,500,000	25,086,222
			Actual sales – Beans (US$)	63,195		2,318 400	2,934,162
			Actual sales – Bird's eye (US$)	40		36,000	59,930
			Actual sales – Cabbage (US$)	1,392		22,500	339,057
			Actual sales – Chillie Pepper (US$)	750		187,500	151,630
			Actual sales – Cow Peas (US$)	6,265		76,800	93,516
			Actual sales – Groundnuts (US$)	28,420		1,224,000	1,013,842
			Actual sales – Butternuts (US$)	2,025		30,000	257,090

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
			Actual Sales – Fine Beans (US$)	9		3,200	5,415
			Actual sales – Peppers (Cherry) (US$)	12		12,000	17,000
			Actual sales – Potatoes (US$)	5,441		80,000	603,000
			Actual sales – Soybeans(US$)	2,888		25,000	65,364
			Actual sales – Sweet Potatoes (US$)	809		224,000	1,029,013
			Actual sales – Tomatoes (US$)	423,705		675,000	2,670,153
			Actual sales- Cattle (US$)	73,488		7,264,508	10,433,264
4	Volume of production by program beneficiaries	Custom (AIED 2)	Total volume of production (Tons)	**22,369**	**83,778**	**180,985**	**148,143**
			Banana (Tons)	174	6,578	24,000	19,742
			Paprika (Tons)	72	987	1,300	737
			Maize (Tons)	21,600	76,213	144,000	110,104
			Beans (Tons)	97,3		2,760	2,653
			Bird's eye (Tons)	0.05		45	72[2]
			Cabbage (Tons)	4.641		75	1,950
			Chillie Pepper (Tons)	1.5		375	257
			Cow Peas (Tons)	21.072		240	235
			Groundnuts (Tons)	256.190		2,040	2,831
			Butternuts (Tons)	10.974		60	547
			Fine Beans (Tons)	0.03		4	10
			Peppers (Cherry) (Tons)	0.03		30	34
			Potatoes (Tons)	9.520		160	900
			Soybeans (Tons)	16.503		100	163
			Sweet Potatoes (Tons)	202.070		2,800	3,091

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
			Tomatoes (Tons)	1, 623		3,000	4,799
5	Value of production by program beneficiaries	Custom (AIED 3)	Total Value of production (US$)	**4,000,000**	**25,720,000**	**33,350,000**	**50,878,829**
			Banana (US$)	40,000	1,580,000	6,000,000	5,526,757
			Paprika (US$)	80,000	1,270,000	1,430,000	910,855
			Maize (US$)	3,880,00	22,870,000	25,920,000	34,422,024
			Beans (US$)	97,309		3,312,000	3,210,372
			Bird's eye (US$)	40		187,500	59,930
			Cabbage (US$)	1,392		22.500	370,500
			Chillie Pepper (US$)	750		187,500	151,630
			Cow Peas (US$)	16,857		192,000	113,253
			Groundnuts (US$)	153,714		1,224,000	1,393,180
			Butternuts (US$)	5,487		30,000	257,090
			Fine Beans (US$)	9		3,200	5,415
			Peppers (Cherry) (US$)	12		12,000	17,000
			Potatoes (US$)	5,045		675,000	603,000
			Soybeans(US$)	6,601		50,000	81,307
			Sweet Potatoes (US$)	36,372		1,120,000	1,046,541
			Tomatoes (US$)	487,034		150,000	2,709,975
6	Area grown per target product	Custom (AIED 4)	Banana (Ha)	100	1,080	1,600	1,872
			Paprika (Ha)	100	700	800	689
			Maize (Ha)	16,000	51,760	72,000	68,057
			Beans (Tons)	97.3		2,300	2,312
			Bird's eye (Ha)	0.1		15	16
			Cabbage (Ha)	2.55		5	75
			Chillie Pepper (Ha)	1		75	75
			Cow Peas (Ha)	30.5		300	227
			Groundnuts (Ha)	246.3		1,700	2,327
			Butternuts (Ha)	2.3		10	60
			Fine Beans (Ha)	0.01		1	2
			Peppers (Cherry) (Ha)	0.01		5	6
			Potatoes (Ha)	3.6		20	60
			Soybeans(Ha)	20.37		100	159

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
			Sweet Potatoes (Ha)	121		560	655
			Tomatoes (Ha)	225.17		250	588
7	Average yields per target product	Custom (AIED 5)	Banana (tons/ha)	1.74	6.00	15.00	10.55
			Paprika (tons/ha)	0.72	1.41	1.60	1.07
			Maize (tons/ha)	1.35	1,47	1.94	1.62
			Beans (tons)	1		1.2	1.15
			Bird's eye (tons/ha)	0.5		3	4.52
			Cabbage (tons/ha)	1.82		25	26.00
			Chillie Pepper (tons/ha)	1.5		5	3.42
			Cow Peas (tons/ha)	0.69		0.8	1.04
			Groundnuts (tons/ha)	1.04		1.2	1.22
			Butternuts (tons/ha)	4.65		6	9.12
			Fine Beans (tons/ha)	3		4	5.00
			Peppers (Cherry) (tons/ha)	3		6	5.67
			Potatoes (tons/ha)	2.63		8	15.00
			Soybeans(tons/ha)	0.81		1	1.03
			Sweet Potatoes (tons/ha)	1.67		5	4.72
			Tomatoes (tons/ha)	7.2		20	8.16
8	Gross margin per unit of land, kilogram, or animal of selected product	FTF 4.5-16	Maize (US$/ha)	37	225	250	213
			Paprika(US$/ha)	220	1,235	1,500	767
			Banana(US$/ha)	416	476	1,000	1,834
			Beans (US$/ha)	690		1,040	1,046
			Bird's eye (US$/ha)	100		1,500	2,946
			Cabbage ((US$/ha)	173		1,000	3,956
			Chillie Pepper (US$/ha)	120		1,700	1,303
			Cow Peas (US$/ha)	502		540	397
			Groundnuts (US$/ha)	361		420	460
			Butternuts (US$/ha)	1,172		1,200	3,778
			Fine Beans (US$/ha)	-100		600	2,439
			Peppers (Cherry)(US$/ha)	200		900	880
			Potatoes (US$/ha)	501		800	3,135
			Soybeans(US$/ha)	35		200	415
			Sweet Potatoes (US$/ha)	270		1,900	1,387
			Tomatoes (US$/ha)	540		1,100	3,844

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
9	# of food security private enterprises (for profit), producers organizations, water users' associations, women's groups, trade and business associations, CBOs receiving USG assistance	FTF 4.5.2-11	Enterprises Organizations Groups Associations	0	689	770	942[3]
10	# of buyer and market-related firms benefiting directly from interventions	Custom (AIED 9)	Buyers/ Firms	0	679	140	420[4]
11	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	FTF 4.5.2-38	US$ m	0	6.73	1.11	1.36[5]
12	# of firms (excluding farms) or CSOs engaged in agricultural and food security-related manufacturing and services, now operating more profitably because of USG assistance	FTF 4.5.2-43	Firms/CSOs	0	14	20	14[6]
13	# of jobs attributed to FTF implementation	FTF 4.5-2	FTE	0	1,159	2,159	1,224[7]
14	# of hectares under improved technologies or management practices as a result of USG assistance	FTF 4.5.2-2	New Ha	0	25,804	11,202	25,379
			Continuing Ha	0	500	25,804	25,379
			Total		26,304	37,006	50,758
15	# of farmers and others who have applied new technologies or management practices as a result of USG assistance	FTF 4.5.2-5	Total	0	32,376	57,376	75,178
			New farmers	0	20,480	25,000	39,744
			Continuing	0	11,896	32,376	35,437
16	# of individuals who have received USG supported short term agricultural sector productivity or food security training	FTF 4.5.2-7	Individuals	0	58,055	60,000	54,851[8]

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
17	# of private enterprises, producers organizations, water users' associations, women's groups, trade and business association & CBOs that applied new technologies or management practices as a result of USG assistance	FTF 4.5.2-42	Enterprises/ Organizations/ Groups/ Associations	0	649	770	942[9]
18	Value of agricultural and rural loans	FTF 4.5.2-29	$ million	0.79	5.38	6.00	6.02
19	# of beneficiaries receiving credit	Custom (AIED 6)	Individuals	1,002	10,758	12,400	6,639[10]
20	Value of cost-sharing with alliance partners	Custom (AIED 7)	$ million	0	0,71	1.00	0.13[11]
21	# of individuals receiving training in business skills	Custom (AIED 10)	Farmers/ Borrowers	0	13,756	10,000	13,245[12]
22	# of MSMEs receiving business development services from USG assisted sources	FTF 4.5.2-37	MSMEs	0	73,520	62,197	64,559[13]
23	# of individuals receiving training in (NRM)	Custom (AIED 11)	Individuals	0	14,563	20,000	16,062[14]
24	Number of lead farmers in assisted programs	GNDR 1	Individuals	538	TBD	538	538[15]
			Females	216		216	216
			Males	322		322	322
25	Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources	GNDR 2	Percent	48		48	48[16]
			Numerator	23,951		23,951	23,954
			Denominator	50,315		50,315	50,313

#	Indicator	Source	Unit	Baseline	FY2011+FY2012	FY2013	
					Actuals	Target	Actuals
26	Number of project participants in relevant leadership positions	GNDR 3	Participants	455		455	455[17]
			Females	159		159	159
			Males	296		296	296
27	Proportion of target populations reporting increased agreement with the concept that males and females should have access to social, economic, and political opportunities	GNDR 4	Proportion / Percent	79		79	79
28	Number of farmers engaged in Contract farming	GNDR 5	Farmers	0	10,350	12,000	6,228
			Female			6,000	2,989[18]
			Male			6,000	3,239